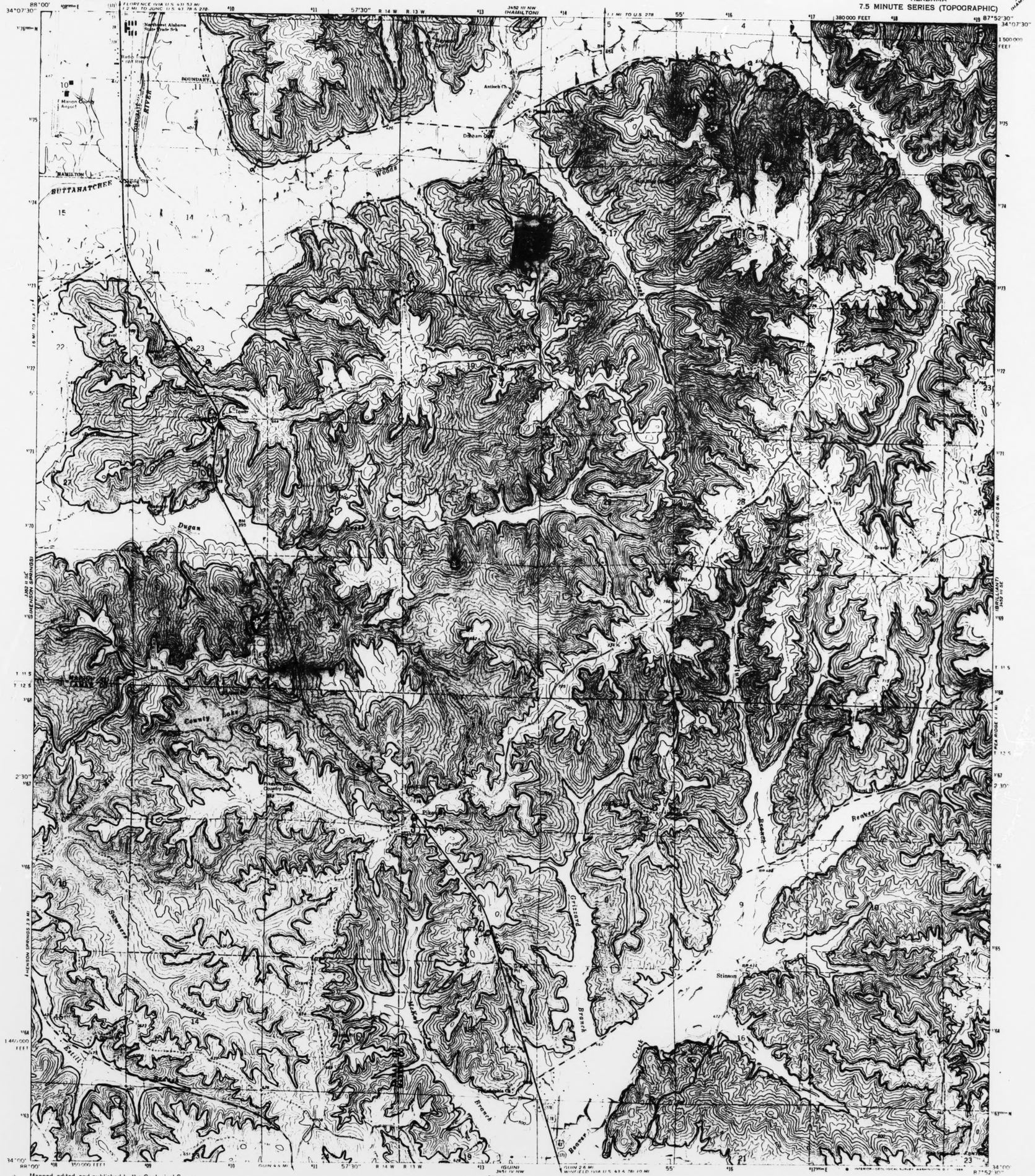
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

HAMILTON SW QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC)


HAMILTON
BUTTAHATCHEE RIVER
Dugan
Pikeville
Stinson
Antioch Ch
Dotham Dam
Wilson Creek
Beaver Creek
Grissard Branch
Hickory Creek
Seaman Creek
Eagle Creek
County Lake
Marion County Airport
Northwest Alabama Multi-Trade Sch
ROUNDARY
Radio Tower
Grave
C Tower
Water Tank
Gravel Pit
Church
Cem
Dam
Lake
Pond
Spring
Mine
Quarry
Oil Well
Gas Well
Trail
Ridge
Creek
Branch
Beaver
Stinson
Grissard
Seaman
Hickory
Eagle
Wilson
Antioch
Dotham
Dugan
Pikeville
County Lake
Marion County Airport
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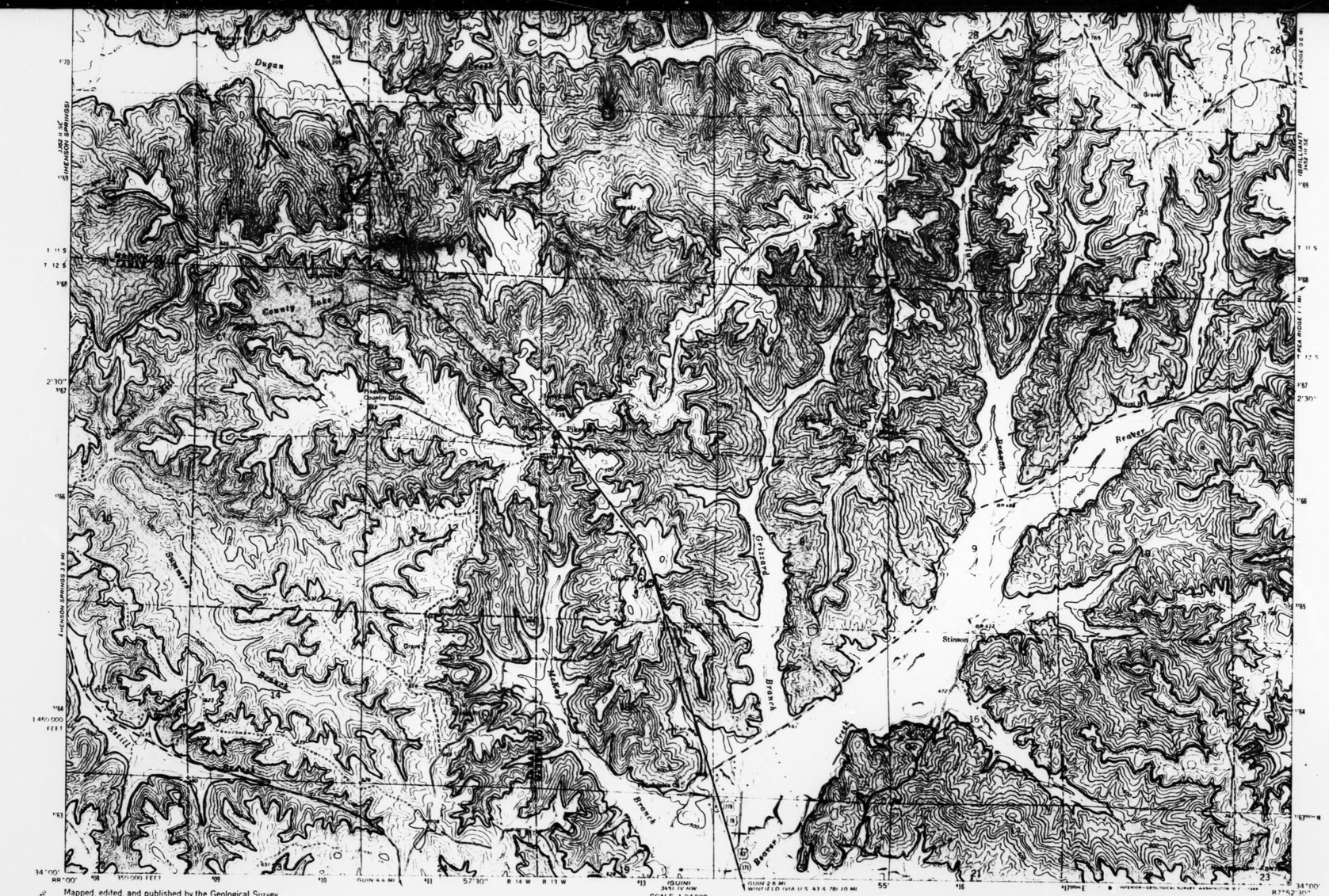
Radio Tower
ROUNDARY
C Tower
Gravel Pit
Water Tank
Cem
Church



Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial standards

ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE HAMILTON SW, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (A-1)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SJSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

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MAN-MADE FEATURES
Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)
- sh bench with high wall
- sf furrowed with high wall
- sd multiple furrows and multiple benches
- ss hilltop removed
- srg reclaimed by grading
- sru reclaimed by secondary use
- sh/r regraded in part, high wall remains

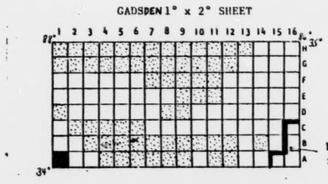
Coal refuse banks
- r identified on aerial photographs; not classified in field check
- rb not burnt nor on fire
- rbb burnt
- rbd burning
- rbs sludge

Quarries
- q quarry site
- qub spoil bank, quarry waste

Gravel pits
- g site of gravel pit

Slides in man-made features
- af earth flow in fill
- a/s earth flow in strip castings
- a/r earth flow in coal refuse

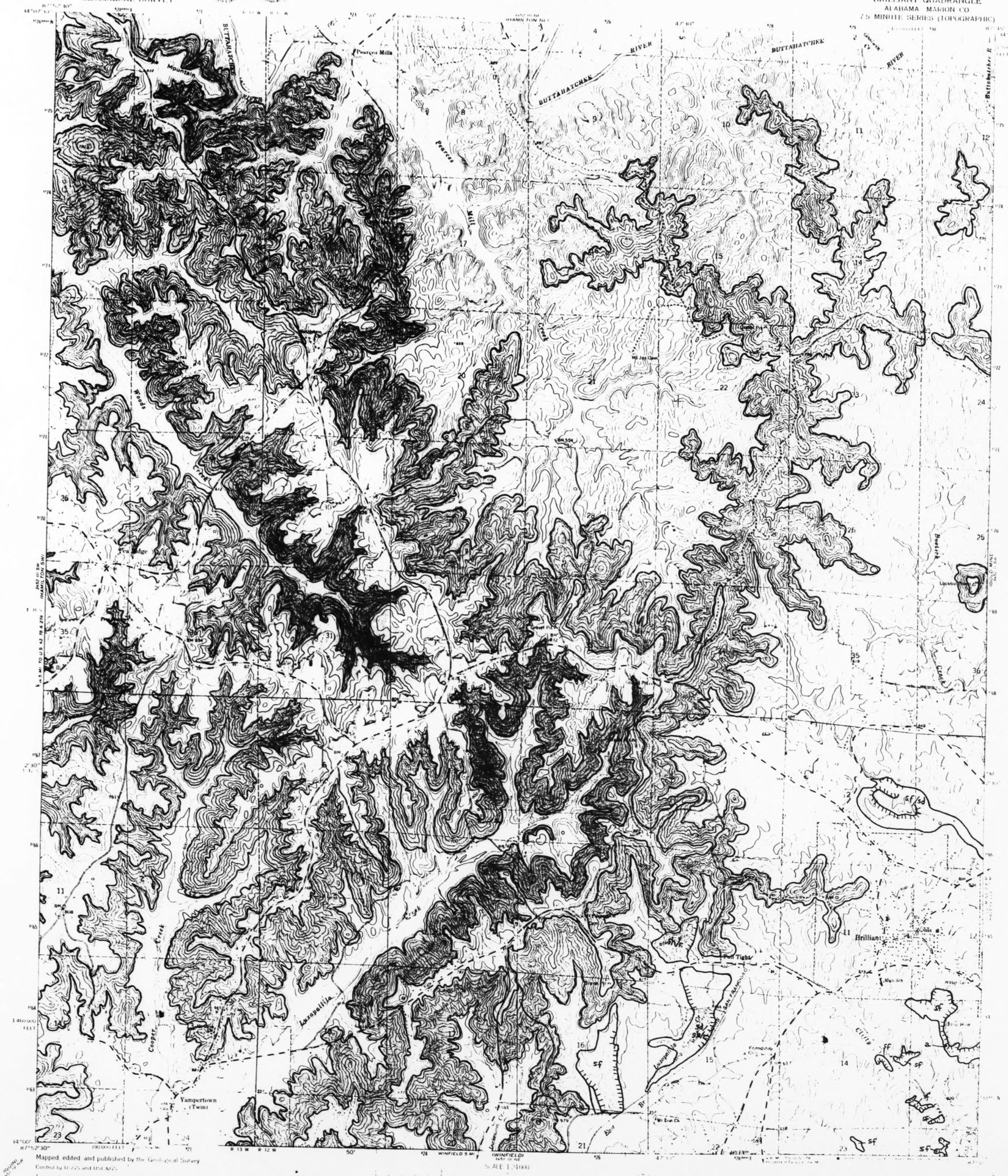
GADSDEN 1° x 2° SHEET

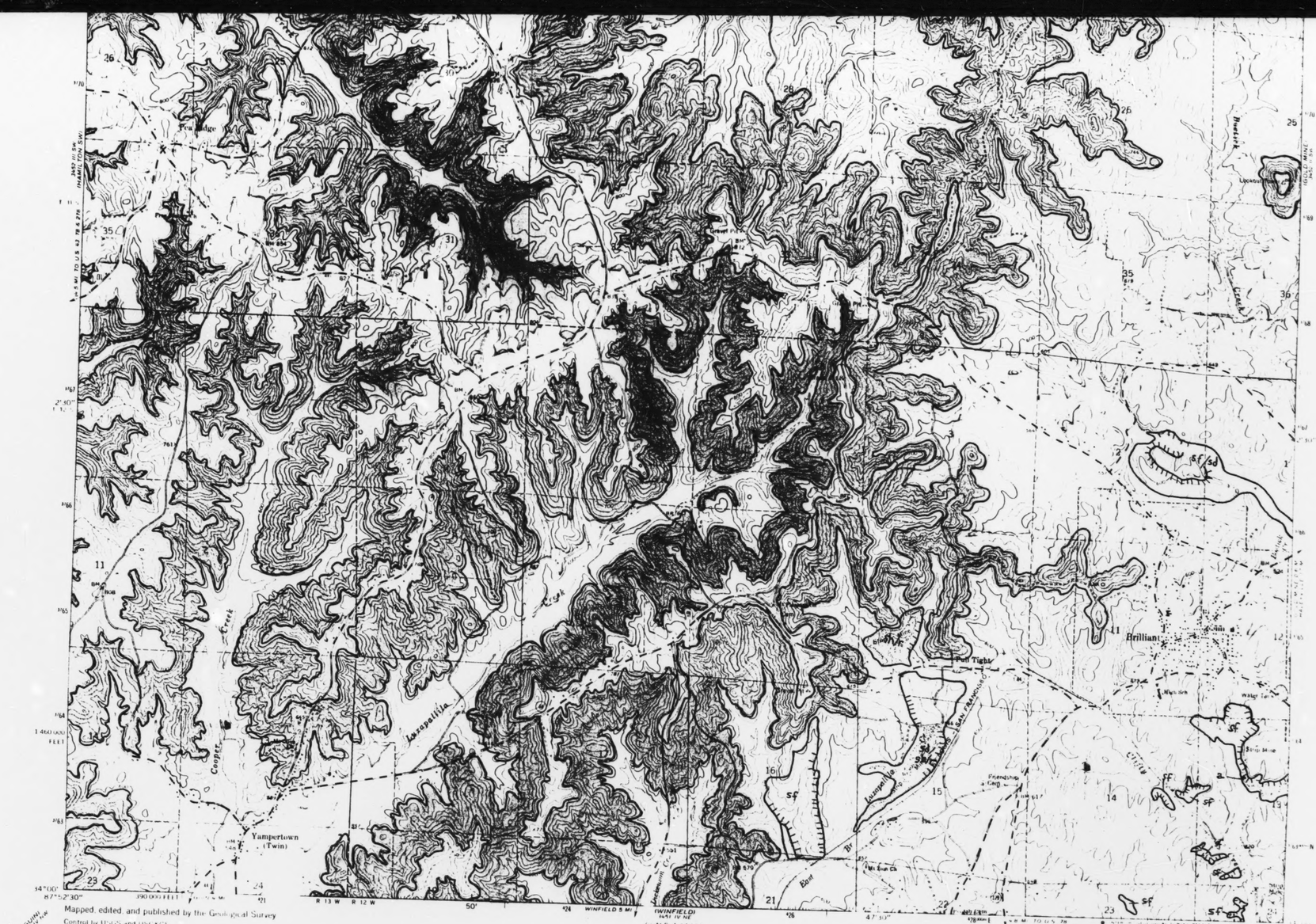


Quadrangle does not contain landslides or related features

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

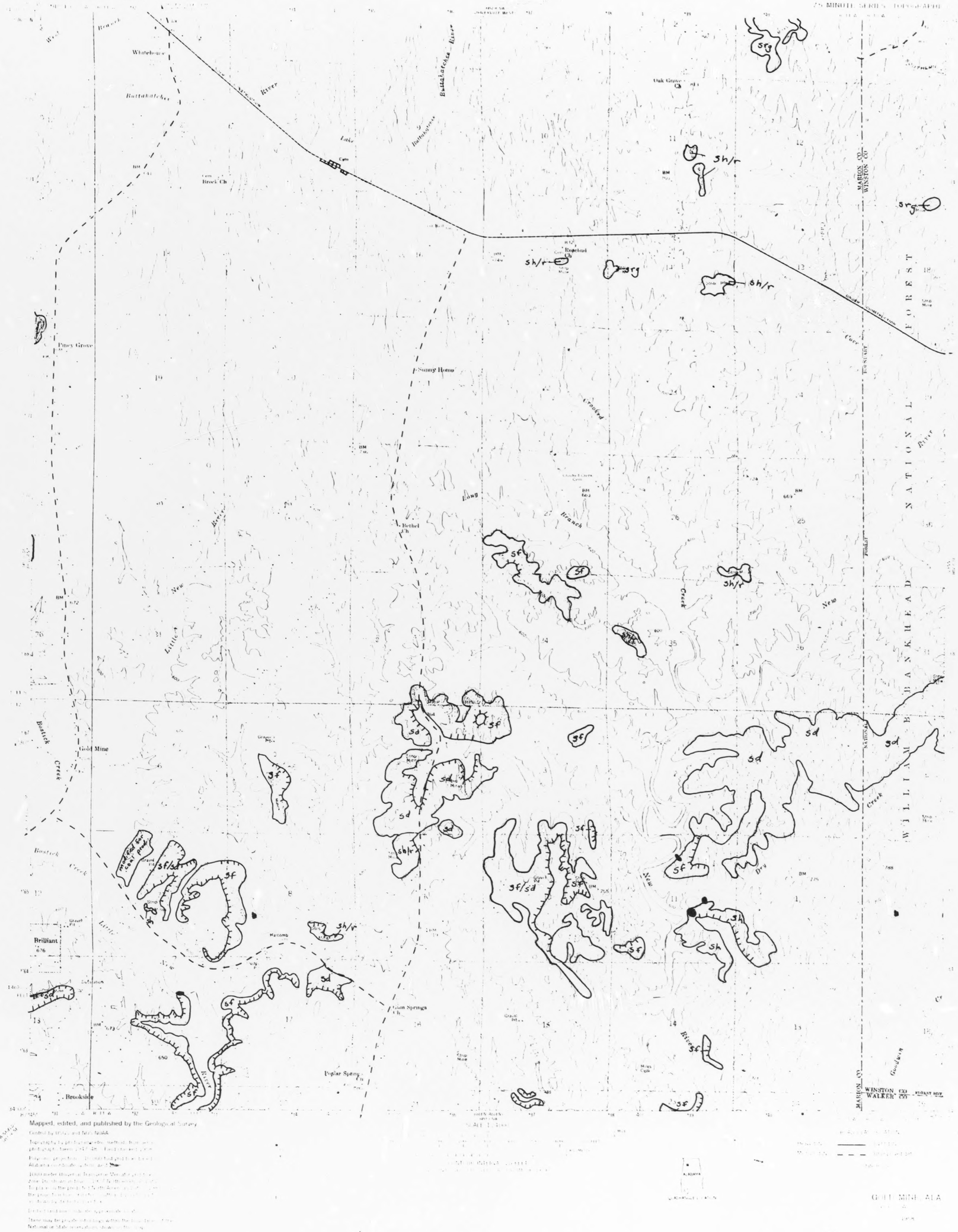
BRILLIANT QUADRANGLE
ALABAMA MARION CO
7.5 MINUTE SERIES (TOPOGRAPHIC)


Pearces Mills
BUTTAHATCHEE RIVER
Pearces Mill
Creek
Woods
Creek
Pea Ridge
Cooper
Creek
Yampertown (Twin)
Brilliant
Bush Creek
Bush Creek
Cedar Creek
Cedar Creek
Bear Creek
Bear Creek
Bear


Fox Ridge
Hudspeth
Brilliant
Full Tight
Yampertown
(Twin)
Coopers Creek
Locust Fork
Friendship Cem
Mt Ebal Ch
Mt Ebal Cem
Bethel Ch
Bethel Cem
Mt Olive Ch
Mt Olive Cem
Pleasant Grove Ch
Pleasant Grove Cem
Mt Hebron Ch
Mt Hebron Cem
Mt Zion Ch
Mt Zion Cem
Mt Pleasant Ch
Mt Pleasant Cem
Mt Carmel Ch
Mt Carmel Cem
Mt Olive Ch
Mt Olive

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

GOLD MINE QUADRANGLE
ALABAMA
7½ MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

GULF MINE ALA

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE GOLD MINE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

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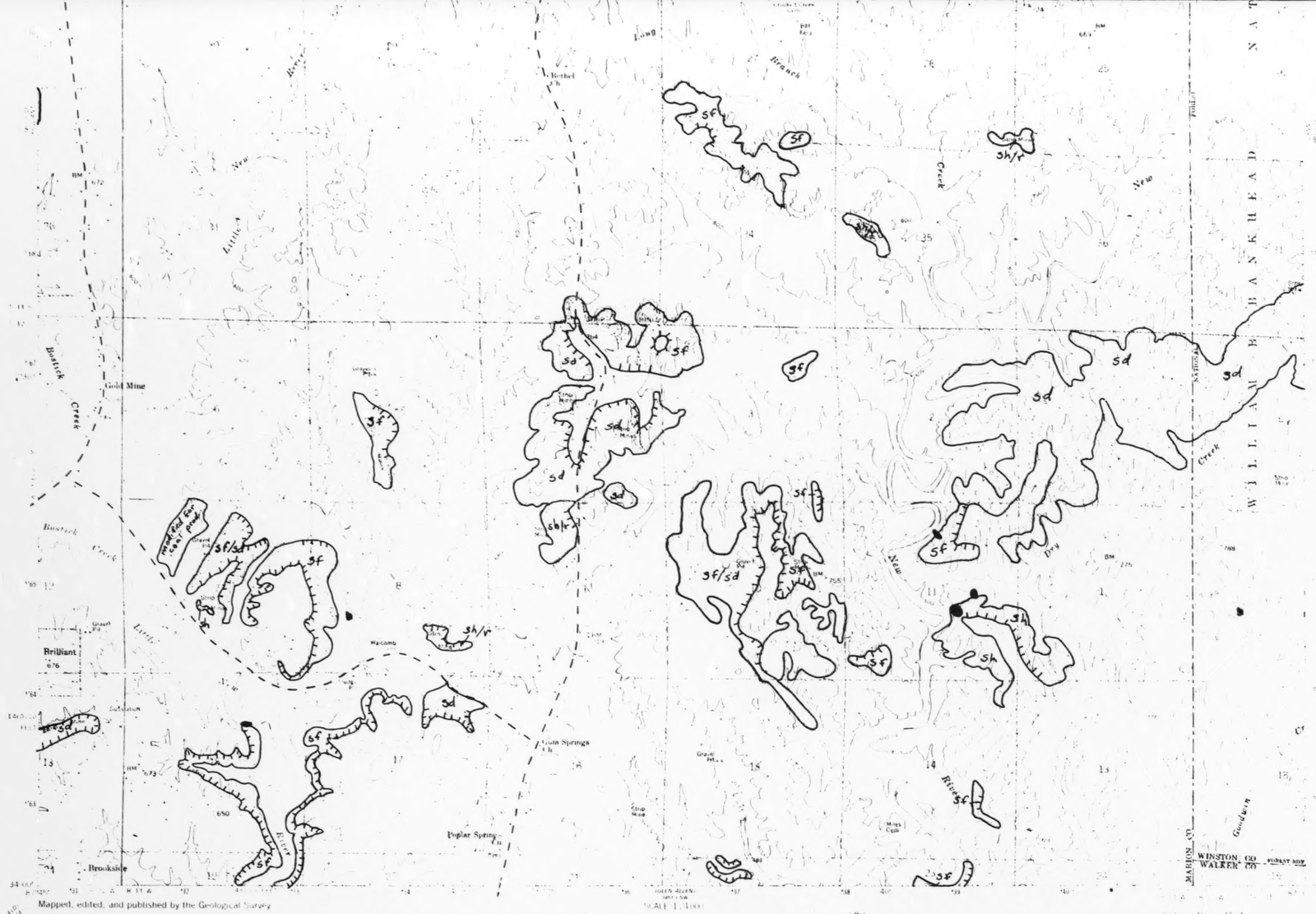

Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1947-48. Field checked 1949

Polyconic projection. 10,000-foot grid ticks based on Alabama coordinate system, west zone

1000-meter Universal Transverse Mercator grid ticks, zone 16, shown in blue

To place on the ground the North American 1927 datum

The projection and grids are the Alabama coordinate system, west zone

Dashed land lines indicate the approximate location

There may be private inholdings within the boundaries of the National or State reservations shown on this map

SCALE 1:24000

GOLD MINE, ALA.

1949

Landslides and related features interpreted from aerial photographs:

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1:40,000 (black and white) 1978

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LANDSLIDES AND RELATED FEATURES

OF THE GOLD MINE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (A-3)

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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

sh	bench with high wall
sf	furrowed with high wall
sd	multiple furrows and multiple benches
ss	hilltop removed
srg	reclaimed by grading
sru	reclaimed by secondary use
sh/r	regraded in part, high wall remains

Coal refuse banks

r	identified on aerial photographs; not classified in field check
rb	not burnt nor on fire
rbb	burnt
rbd	burning
rbs	sludge

Quarries

q	quarry site
qub	spoil bank, quarry waste

Gravel pits

g	site of gravel pit

Slides in man-made features

af	earth flow in fill
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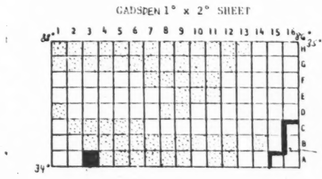
GADSDEN 1° x 2° SHEET

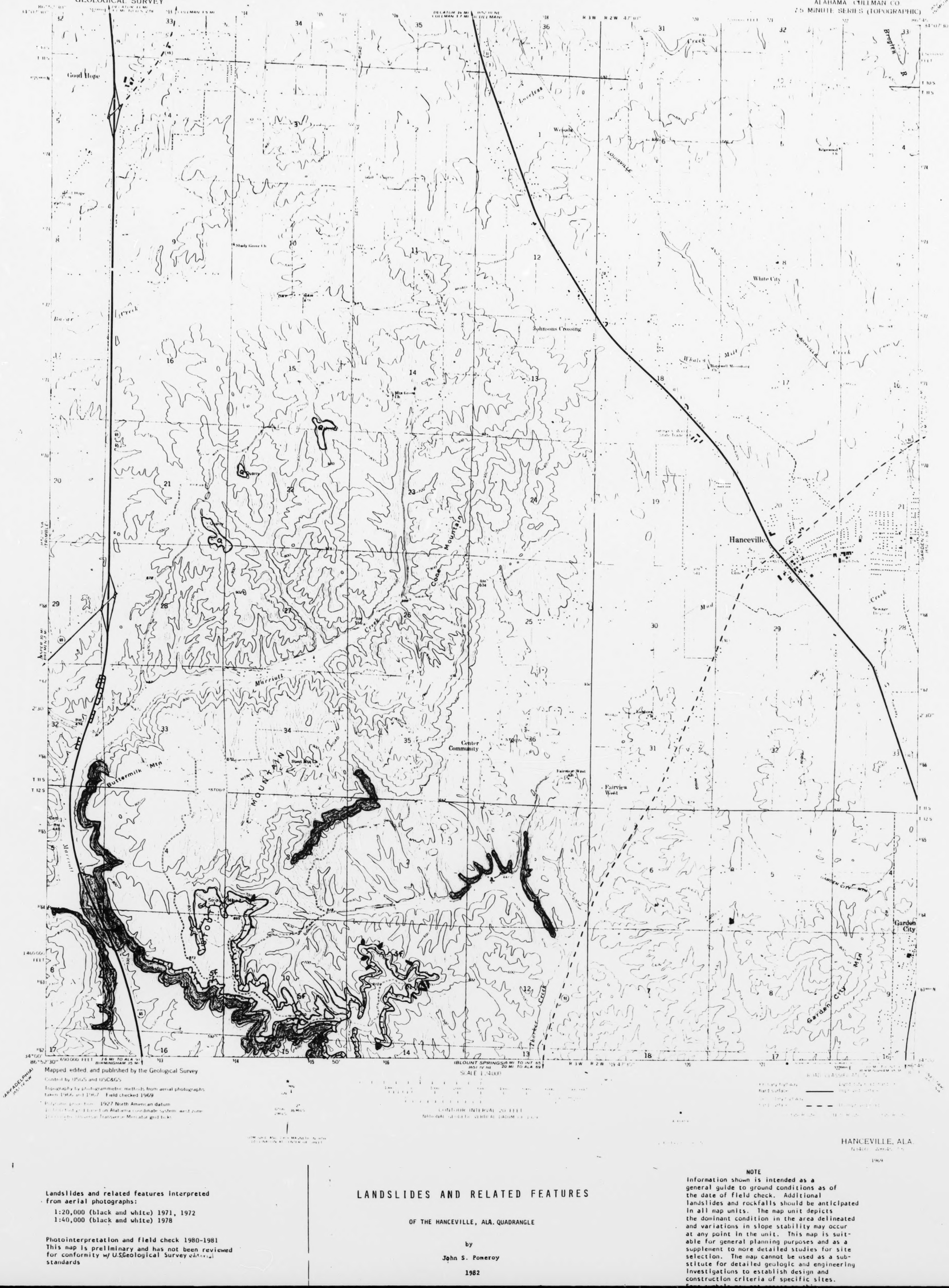


Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

HANCEVILLE QUADRANGLE
ALABAMA-COLEMAN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1969, and 1967. Field checked 1969

Polyconic projection. 1927 North American datum

10,000-foot grid based on Alabama coordinate system, west zone

1000-meter Universal Transverse Mercator grid ticks

SCALE 1:24000

CONTOUR INTERVAL 20 FEET

HANCEVILLE, ALA.

1969

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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LANDSLIDES AND RELATED FEATURES

OF THE HANCEVILLE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

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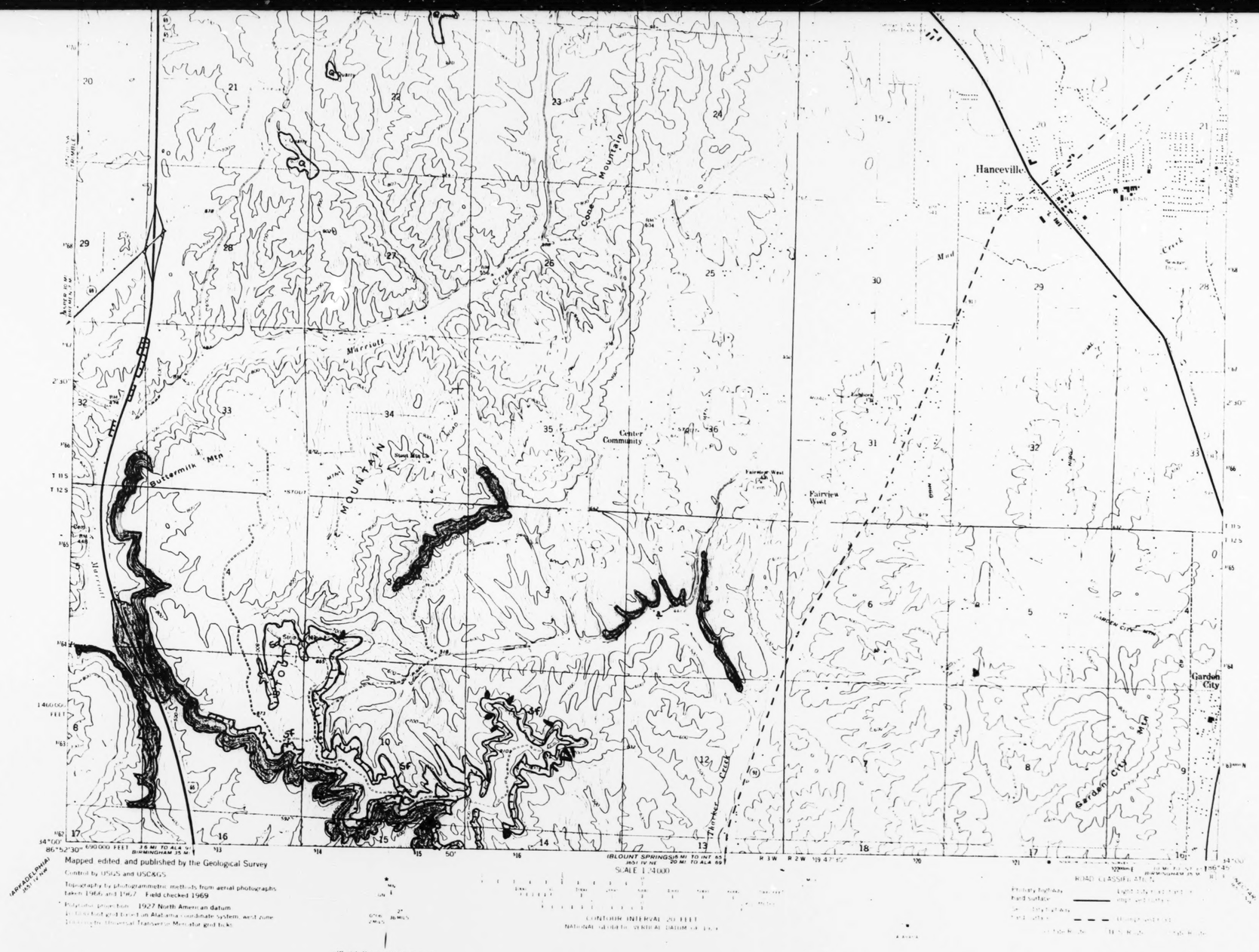

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1966 and 1967. Field checked 1969

Polyconic projection. 1927 North American datum

10,000-foot grid based on Alabama coordinate system, west zone

1000-foot ticks: Universal Transverse Mercator grid ticks

HANCEVILLE, ALA.

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LANDSLIDES AND RELATED FEATURES

OF THE HANCEVILLE, ALA. QUADRANGLE

by

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1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (A-10)

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- qub spoil bank, quarry waste

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- a/s earth flow in strip castings
- a/r earth flow in coal refuse

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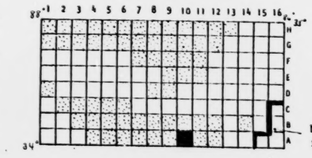
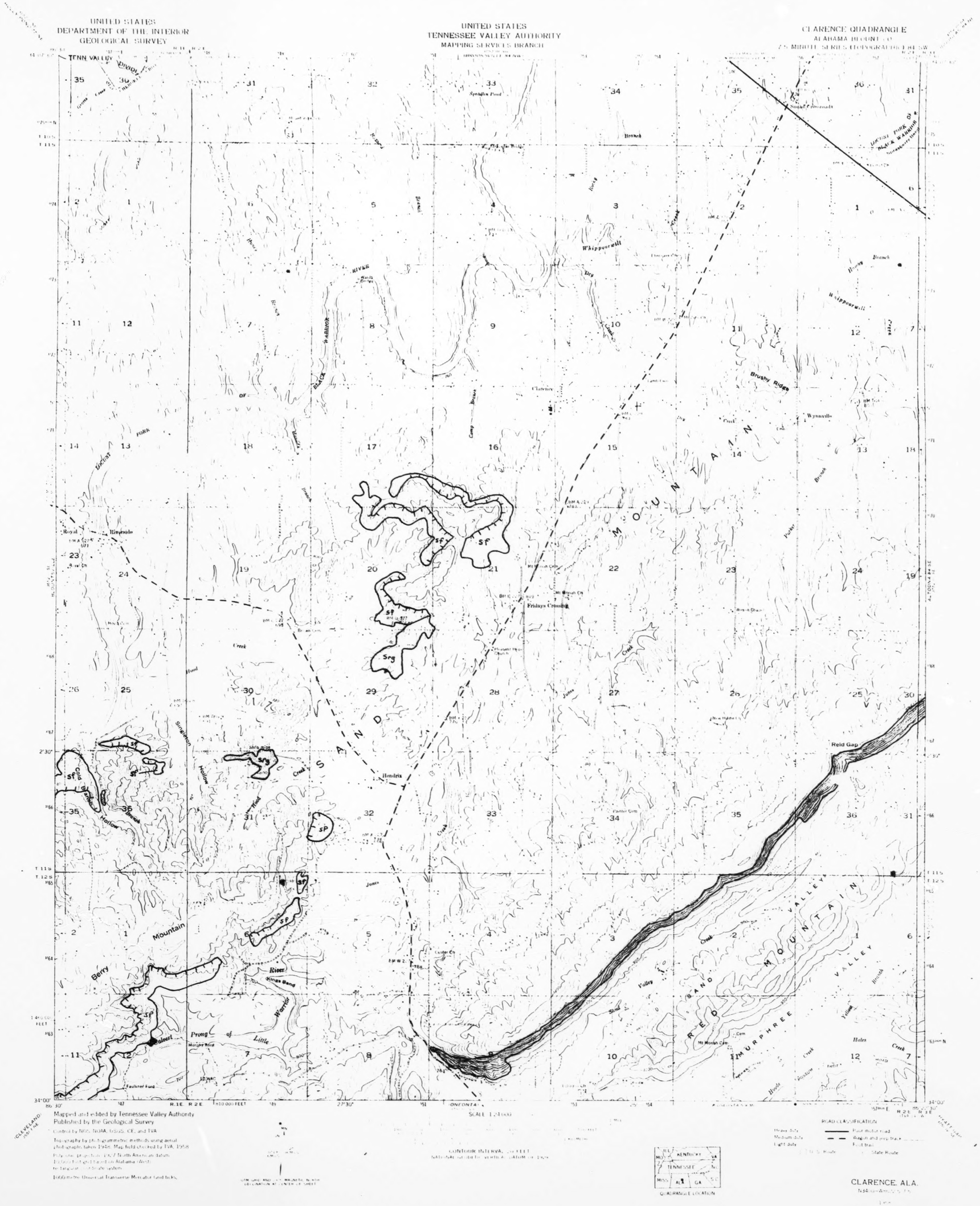


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

CLARENCE QUADRANGLE
ALABAMA-BLOUNT CO.
7.5 MINUTE SERIES (TOPOGRAPHIC) DRG SW



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS, NOAA, USGS, CE, and TVA

Topography by photogrammetric methods using aerial photographs taken 1948. Map field checked by TVA, 1958

Polyconic projection. 1927 North American datum
10,000-foot grids based on Alabama (West) coordinate system

1000-meter Universal Transverse Mercator grid ticks

CLARENCE, ALA.

Landslides and related features interpreted from aerial photographs:

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1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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LANDSLIDES AND RELATED FEATURES

OF THE CLARENCE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

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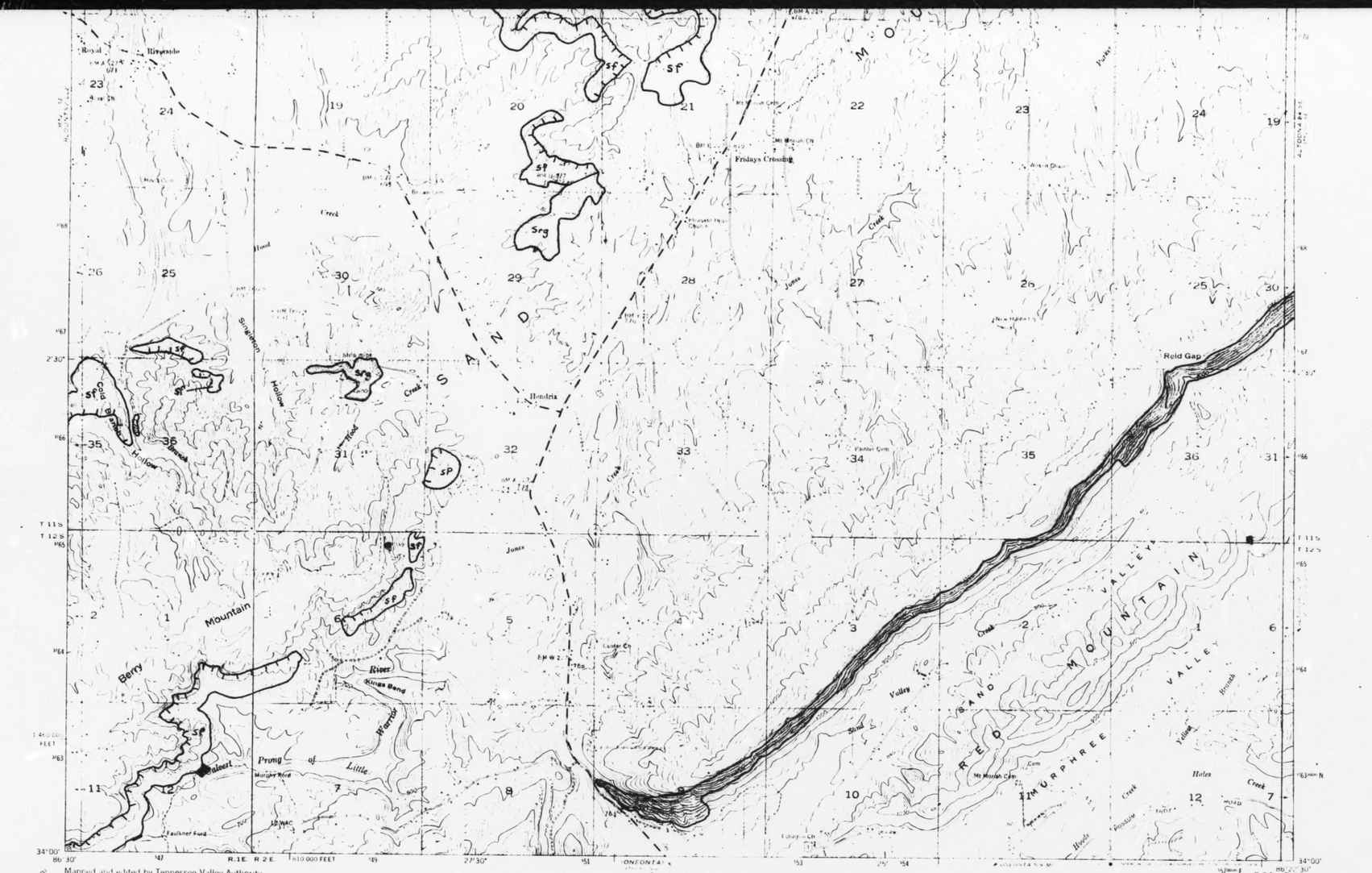

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10,000 foot grid based on Alabama (West) coordinate system
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OPEN FILE MAP 82-184 (A-13)

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Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

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MAN-MADE FEATURES

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sh	bench with high wall
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sd	multiple furrows and multiple benches
ss	hilltop removed
srg	reclaimed by grading
sru	reclaimed by secondary use
sh/r	regraded in part, high wall remains

Coal refuse banks

r	identified on aerial photographs; not classified in field check
rb	not burnt nor on fire
rbb	burnt
rbd	burning
rbs	sludge

Quarries

q	quarry site
qub	spoil bank, quarry waste

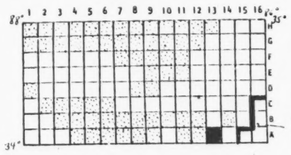
Gravel pits

g	site of gravel pit

Slides in man-made features

af	earth flow in fill
a/s	earth flow in strip castings
a/r	earth flow in coal refuse

GADSDEN 1° x 2° SHEET



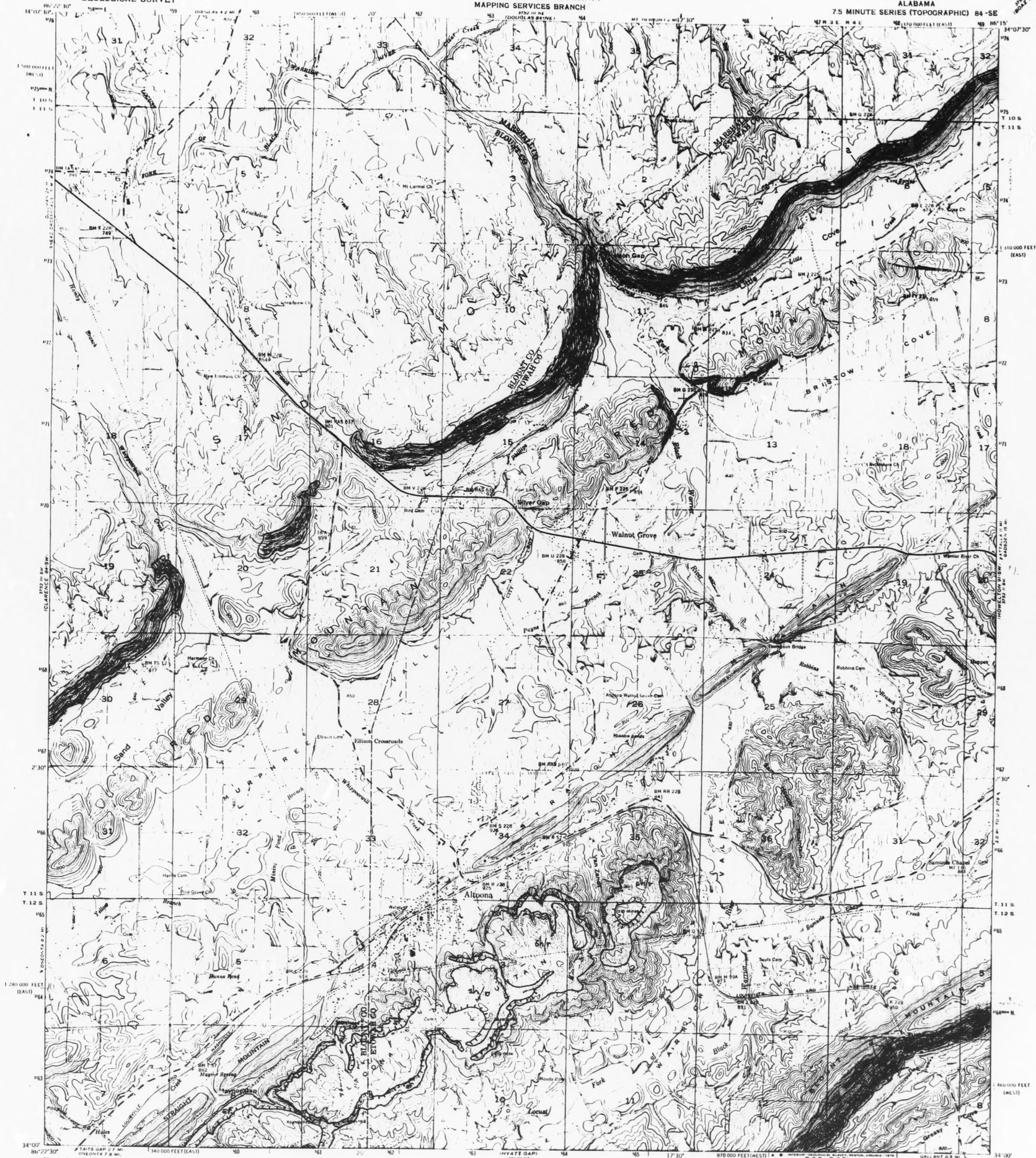
Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

ALTOONA QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 84-SE



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS/NOAA, USGS, CE, and TVA

Topography by photogrammetric methods using aerial photographs taken 1948. Map field checked by TVA, 1958

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) and Alabama (West) rectangular coordinate systems

1000-metre Universal Transverse Mercator Grid ticks, Zone 16, shown in blue

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
DASHED CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION

Heavy-duty	Poor motor road
Medium duty	Wagon and jeep track
Light duty	Foot trail
U. S. Route	State Route

In developed areas, only through roads are classified

QUADRANGLE LOCATION

ALTOONA, ALA.
N3400—W8615/7.5
1958

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE ALTOONA, ALA. QUADRANGLE

by

John S. Pomeroy

NOTE

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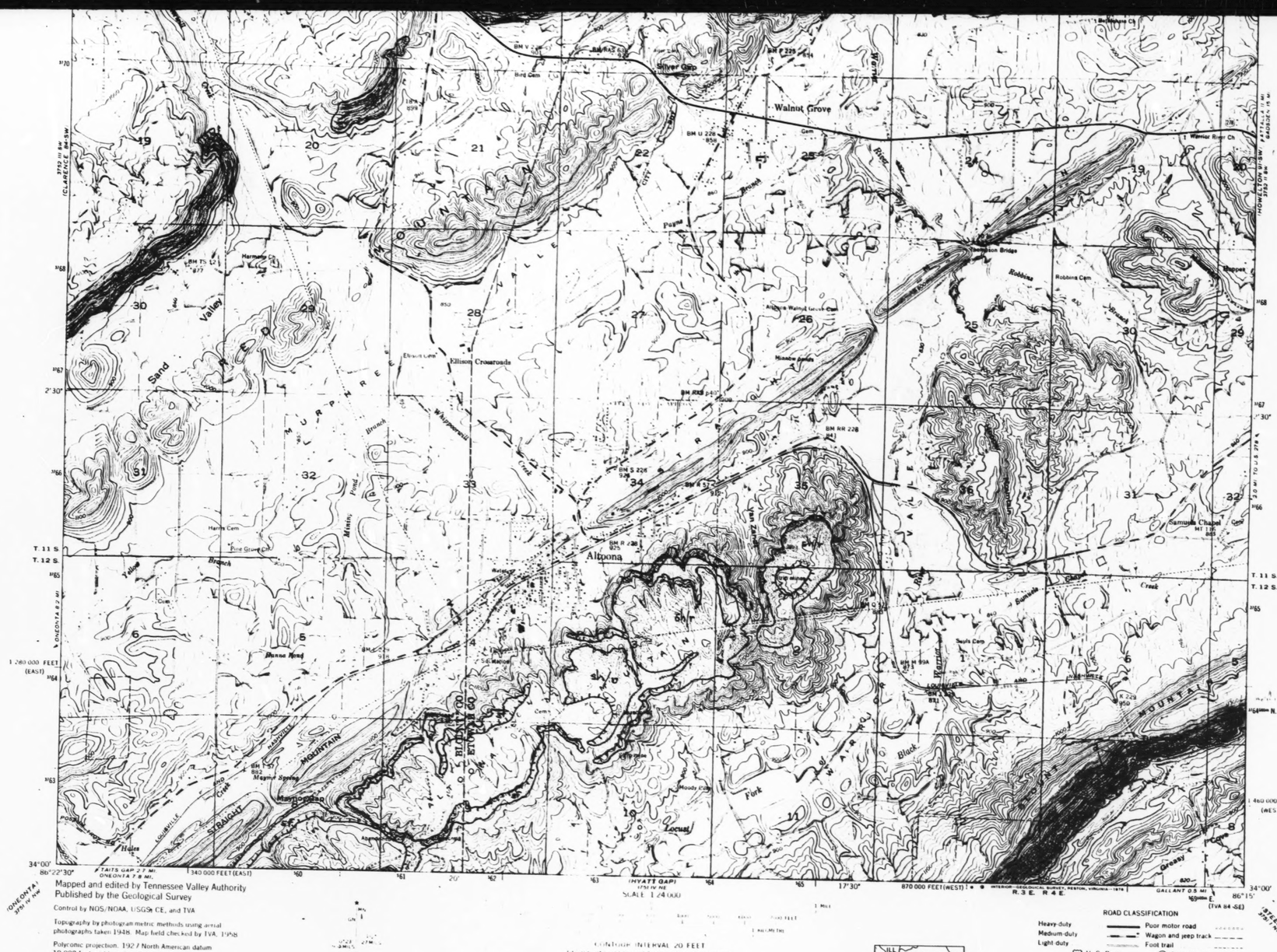

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OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE ALTOONA, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (A-N)

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g	site of gravel pit

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af	earth flow in fill
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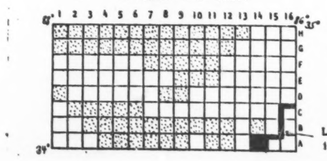
a/r	earth flow in coal refuse

GADSDEN 1° x 2° SHEET

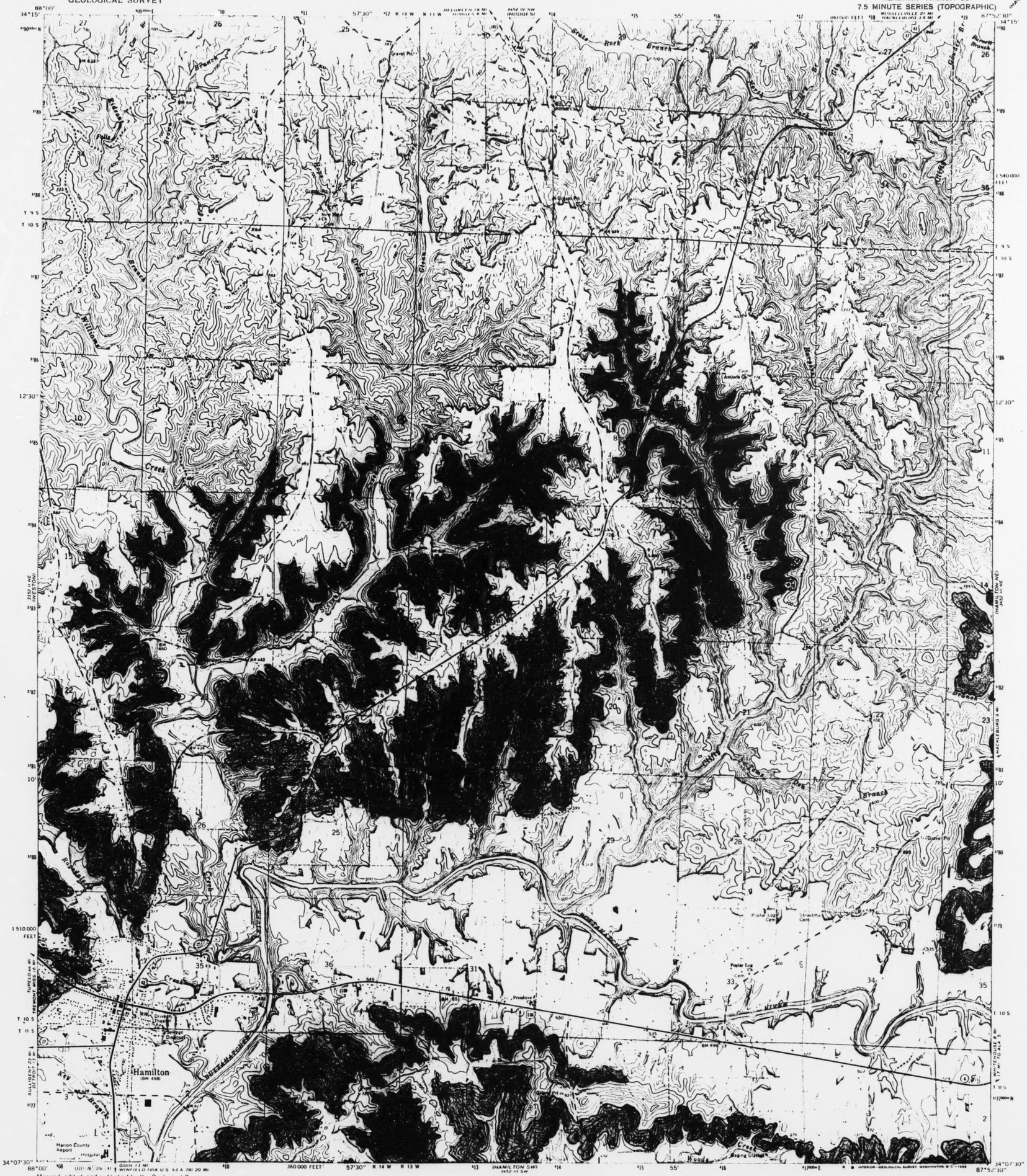


Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

HAMILTON QUADRANGLE
ALABAMA – MARION CO
7.5 MINUTE SERIES (TOPOGRAPHIC)


Straw Rock Branch
Rock Creek
Williams Branch
Williams Creek
Bee Branch
Hamilton
(BM 498)
Marion County Airport
Hospital
Poplar Log Cem
Pinehurst Cem
Radar Sta
Tanbark Cr
Tanbark Church
Tanbark Ch
Dover Pit
Gravel Pit
Water Tank
Ridge
Creek
Branch
Hollow
Gin
Mine
Church
Cem
Dam
Tower
Well
Spring
Trail
Road
Bridge
Ford
Fence
Pipeline
Power Line
Levee
Canal
Ditch
Pond
Lake
Reservoir
Tank
Building
Quarry
Dwelling
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Church
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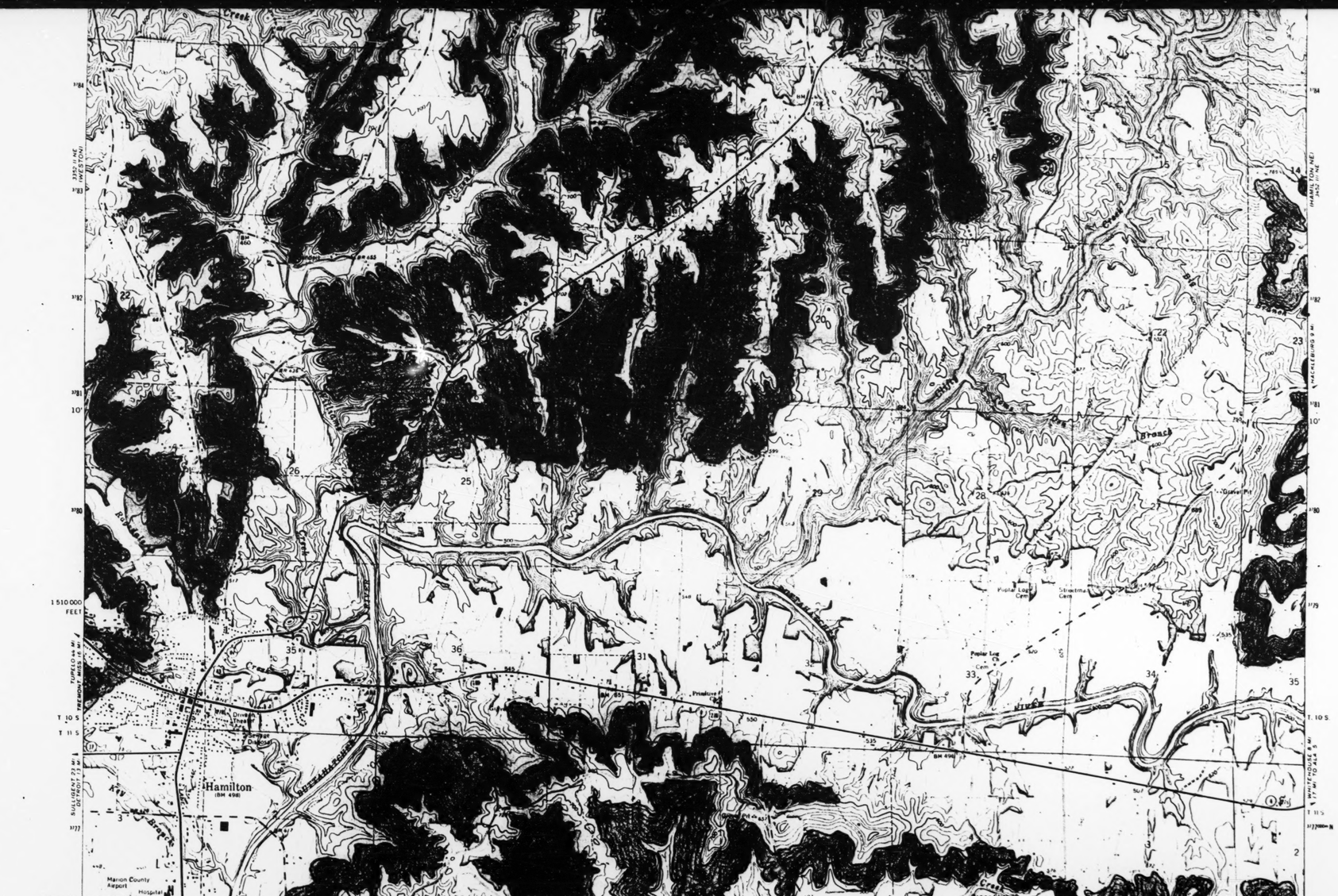
Dam
Bridge
Ford
Trail
Road



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1966. Field checked 1967

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama coordinate system, west zone
1000-meter Universal Transverse Mercator grid ticks.

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

UTM GRID AND 1967 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

ROAD CLASSIFICATION

Heavy duty — Light duty
Medium duty - - - Unimproved dirt
U.S. Route State Route

HAMILTON, ALA.
N3407.5—W8752.5/7.5
1967

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S. Geological Survey editorial standards

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LANDSLIDES AND RELATED FEATURES

OF THE HAMILTON, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (B-1)

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MAN-MADE FEATURES

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- sh bench with high wall
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- ss hilltop removed
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Coal refuse banks
- r identified on aerial photographs; not classified in field check
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- rbd burning
- rbs sludge

Quarries
- q quarry site
- qub spoil bank, quarry waste

Gravel pits
- g site of gravel pit

Slides in man-made features
- af earth flow in fill
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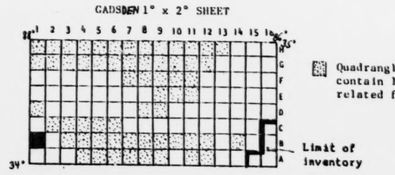
GADSDEN 1° x 2° SHEET



Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

HAMILTON NE QUADRANGLE
ALABAMA-MARION CO
7.5 MINUTE SERIES (TOPOGRAPHIC)

Barrett Branch
Pickering Mill Creek
Tyre Mill
Tyre Mill Pond
Creek
Camp
Creek
Barn
Branch
Creek
Camp
Creek
Barn
Creek
Camp
Creek
Barn
Creek
Creek
Branch
Creek
Creek
Creek

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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LANDSLIDES AND RELATED FEATURES

OF THE HAMILTON NE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (B-2)

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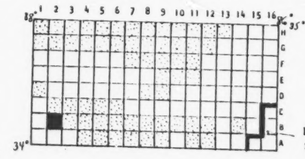

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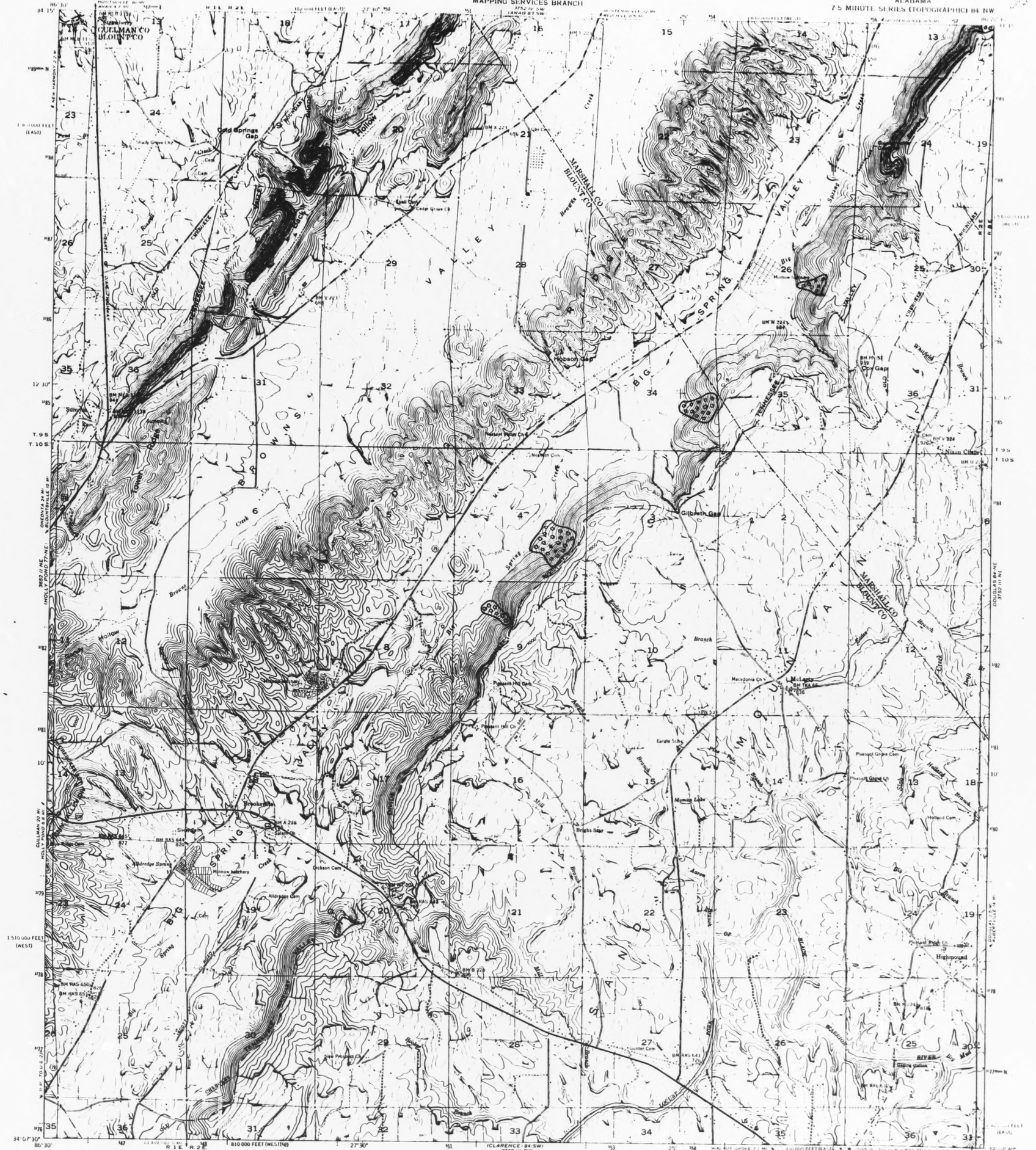
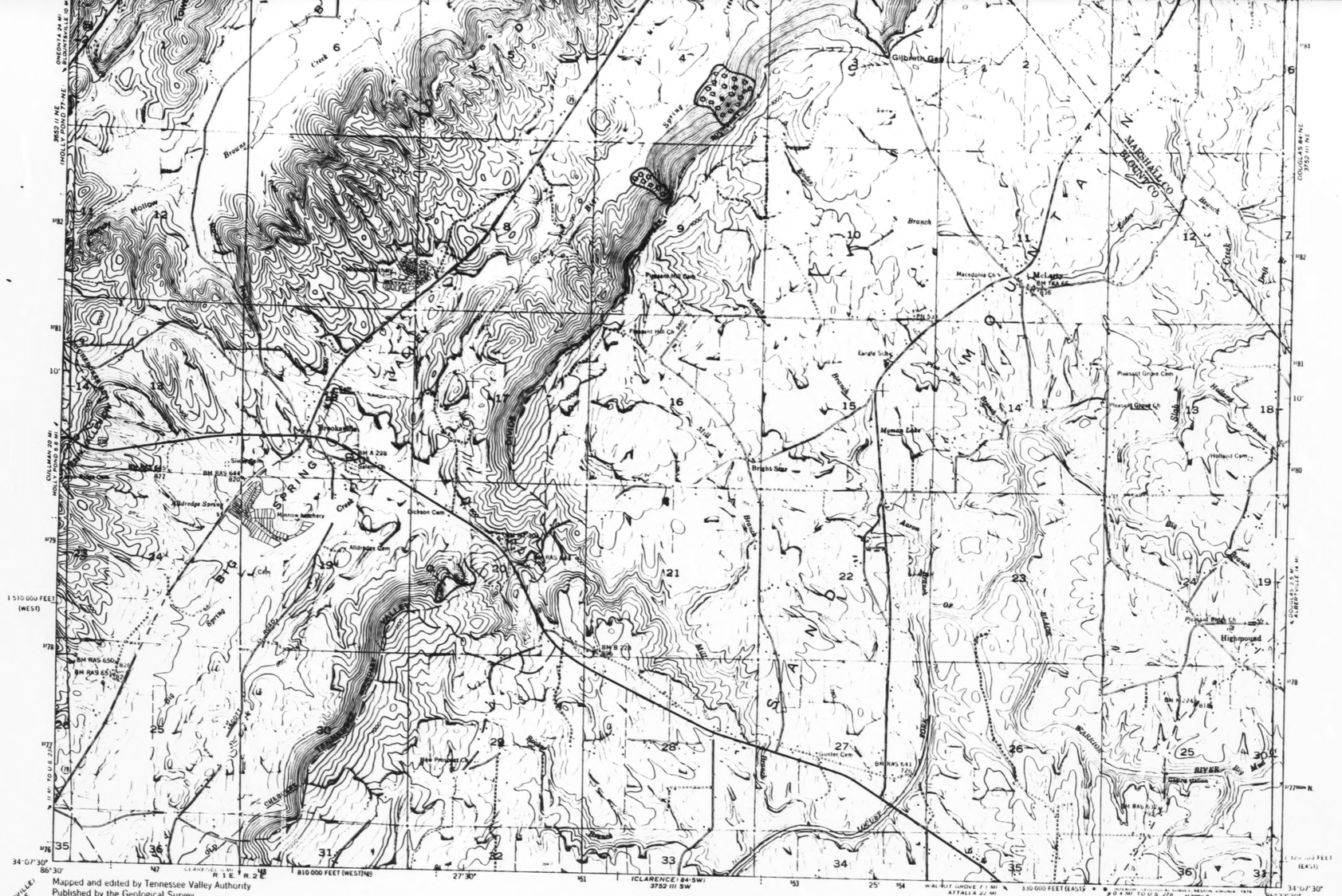
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

BROOKSVILLE QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 84 NW





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LANDSLIDES AND RELATED FEATURES

OF THE BROOKSVILLE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

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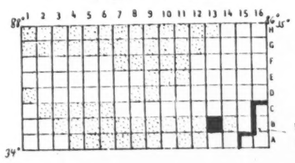
GADSDEN 1° x 2° SHEET



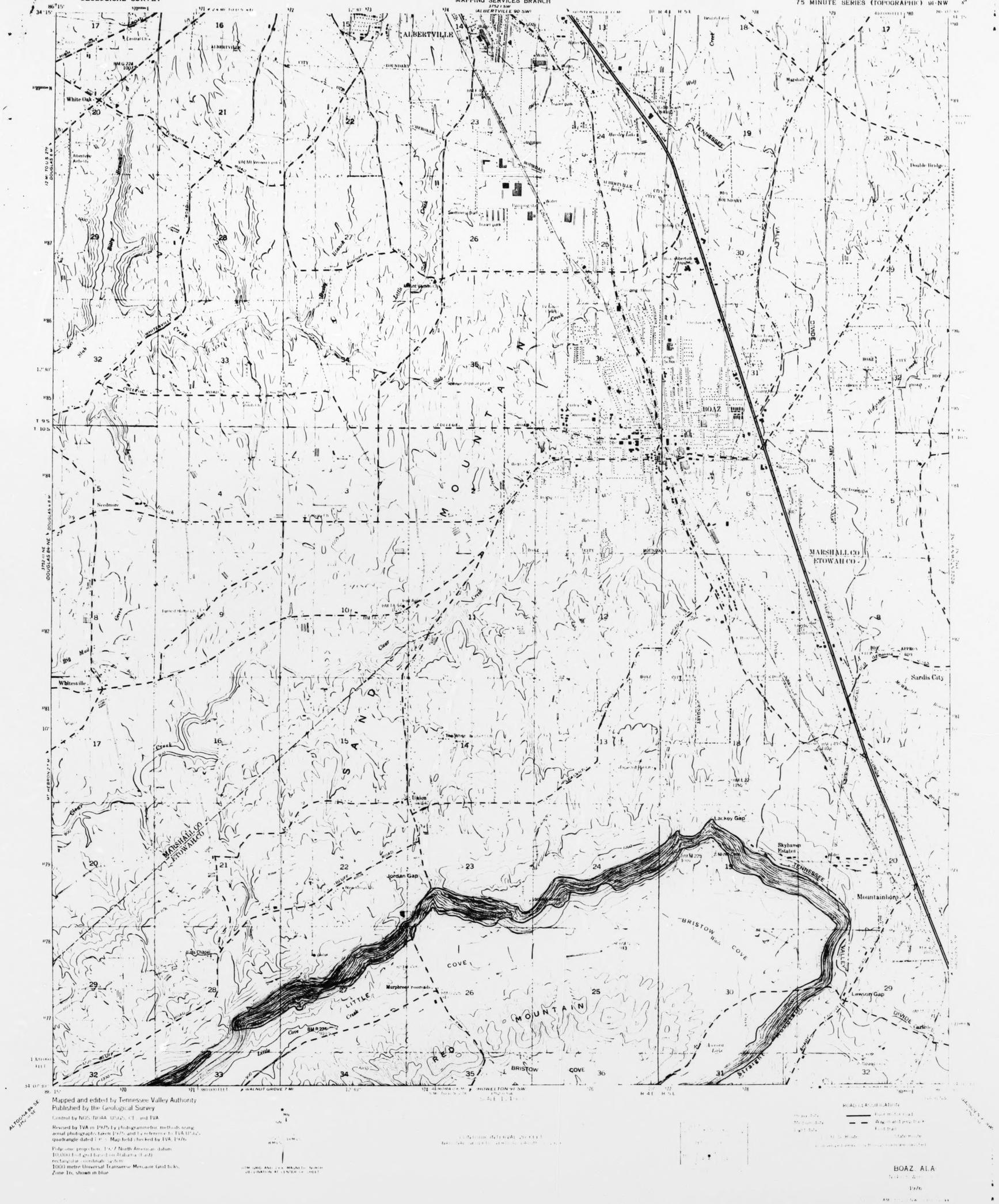
Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

BOAZ QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) SE-NW



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS/NOAA, USGS, CE, and TVA

Revised by TVA in 1975 by photogrammetric methods using aerial photographs taken 1971 and by reference to TVA 1976 quadrangle dated 1976. Map field checked by TVA, 1976

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama (East)
rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks,
Zone 16, shown in blue

ROAD CLASSIFICATION

BOAZ, ALA.
1976

LANDSLIDES AND RELATED FEATURES

OF THE BOAZ, ALA. QUADRANGLE

by

John S. Pomeroy

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/U.S.Geological Survey editorial standards

NOTE

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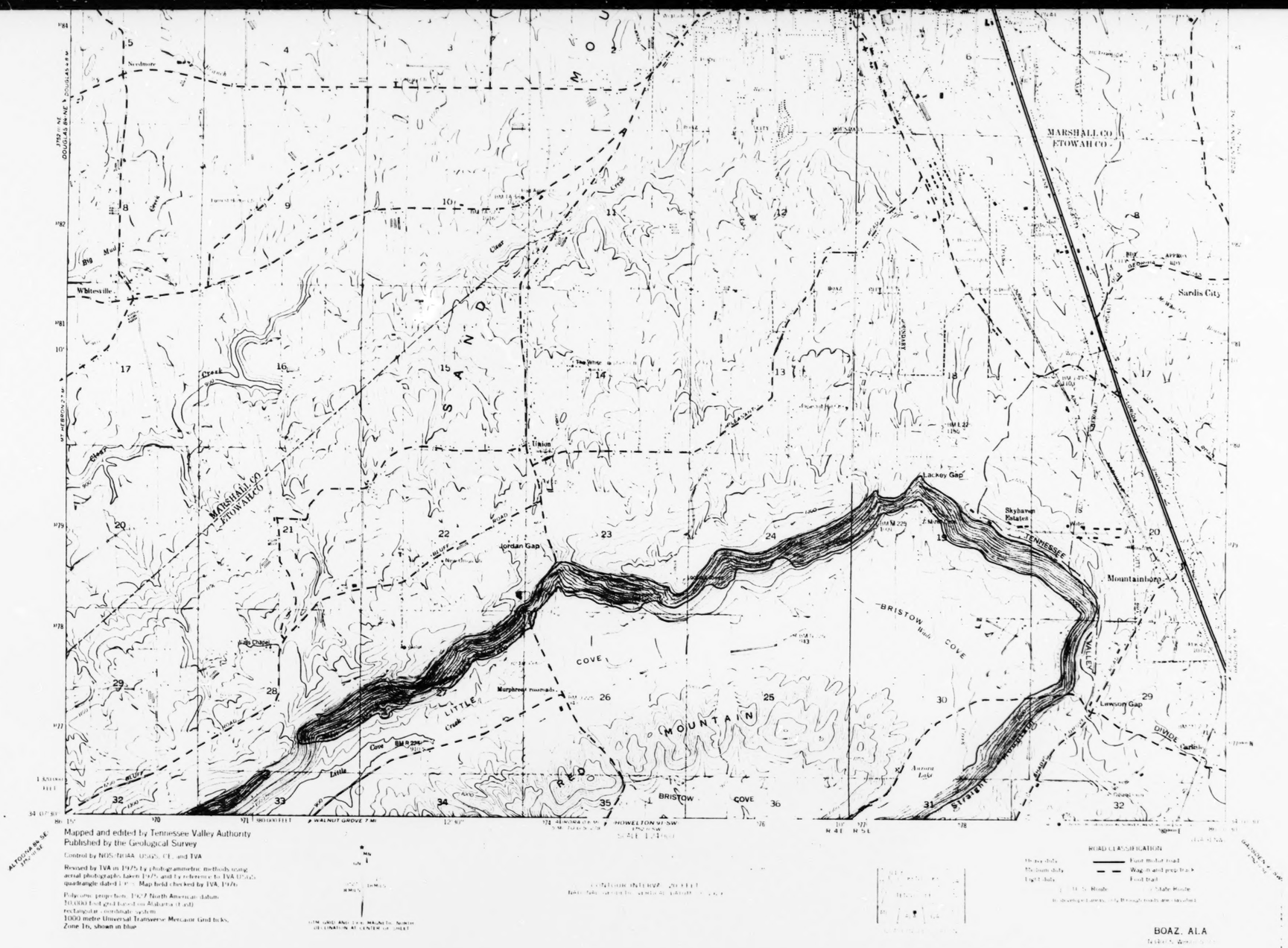

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LANDSLIDES AND RELATED FEATURES

OF THE BOAZ, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (B-15)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
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The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

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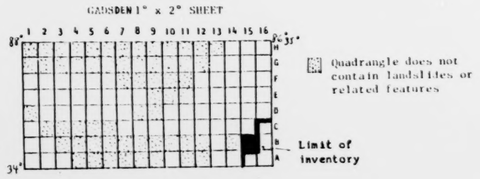

UNITED STATES
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GEOLOGICAL SURVEY

HODGES QUADRANGLE
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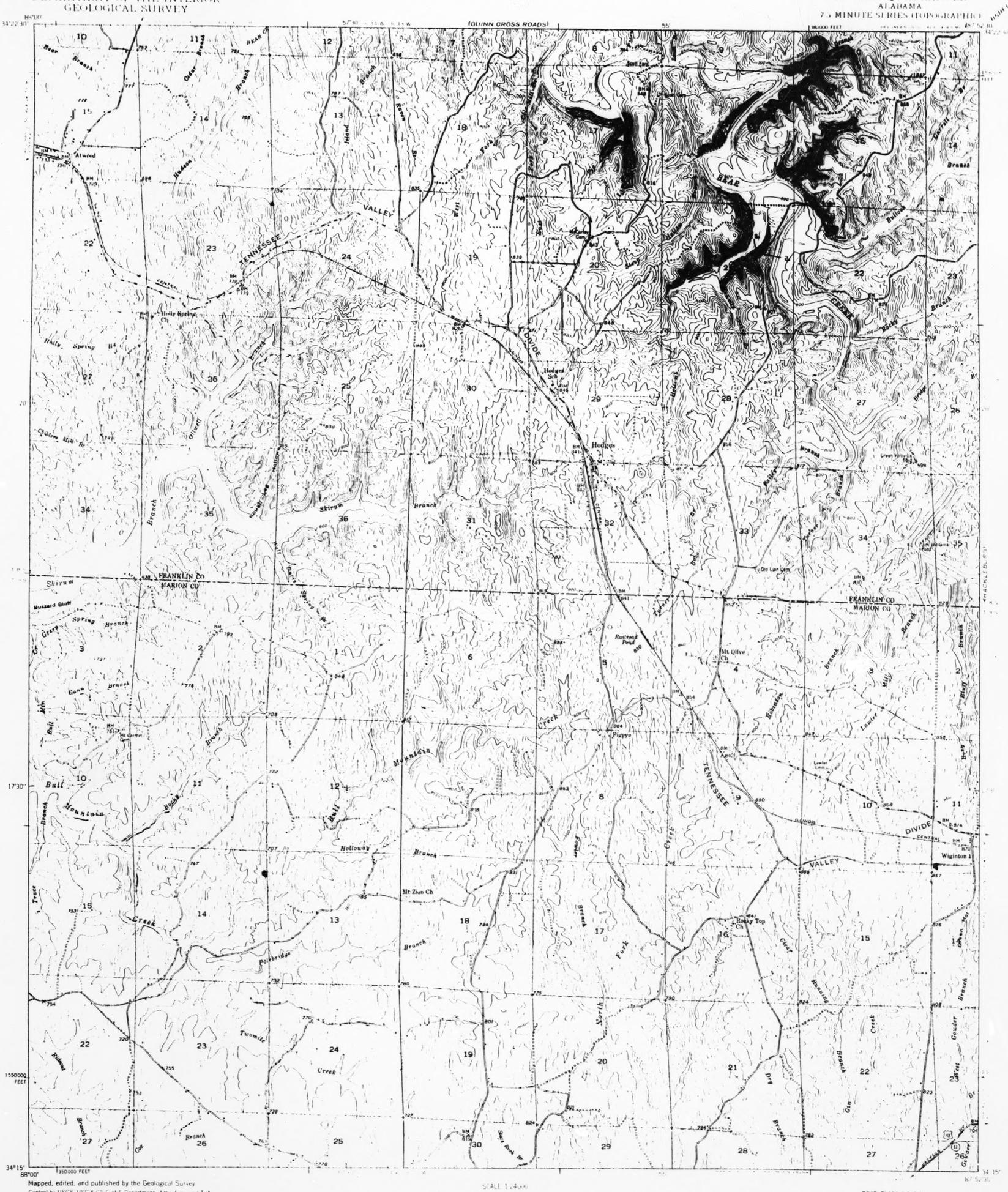
(QUINN CROSS ROADS)
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Holloway
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Railroad Pond
Lawler Lake
Lawler Cem
Mt Carmel
Buzzard Bluff
Spring Branch
Gum Branch
Cedar Branch
Bear Branch
Hills Spring
Childers Mill Br
Rocky Top
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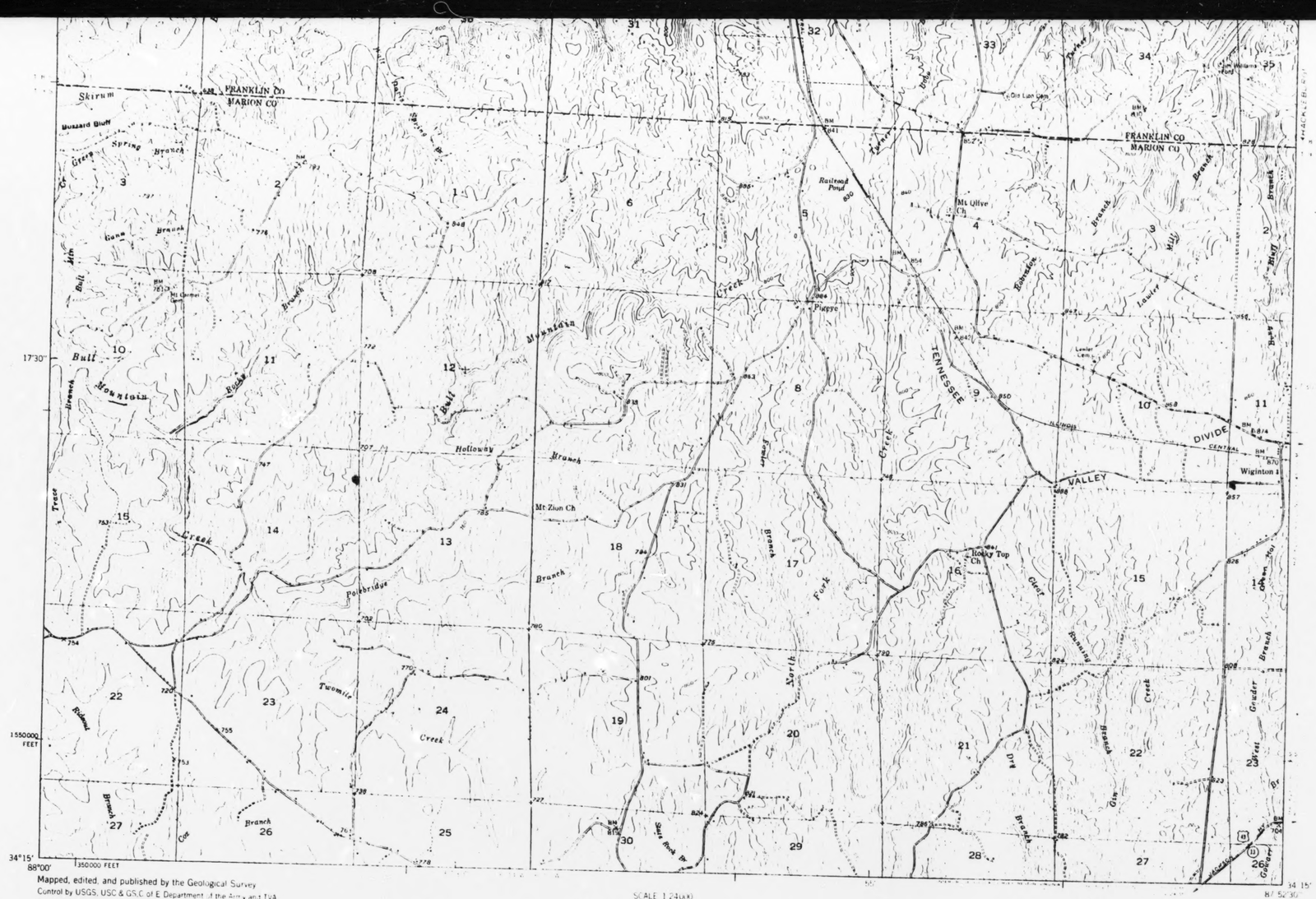

Mapped, edited, and published by the Geological Survey

Control by USGS, USC & GS,C of E Department of the Army and TVA

Culture and drainage in part compiled from aerial photographs taken 1938 and 1941

Topography by plane table methods 1945, 1947

Polyconic projection 1927 North American datum
10,000 foot grid based on Alabama coordinate system, west zone

ROAD CLASSIFICATION

HARD SURFACE ALL WEATHER ROADS		DRY WEATHER ROADS
Heavy duty		Improved dirt
Medium duty		Unimproved dirt
Loose surface, graded, or narrow hard surface		

U. S. Route ( ) State Route

HODGES, ALA.
N3415—W8752½/7½

PRINTED 1984

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LANDSLIDES AND RELATED FEATURES

OF THE HODGES, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

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AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

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MAN-MADE FEATURES
Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

sh	bench with high wall
sf	furrowed with high wall
sd	multiple furrows and multiple benches
ss	hilltop removed
srg	reclaimed by grading
sru	reclaimed by secondary use
sh/r	regraded in part, high wall remains

Coal refuse banks

r	identified on aerial photographs; not classified in field check
rb	not burnt nor on fire
rbb	burnt
rbd	burning
rbs	sludge

Quarries

q	quarry site
qub	spoil bank, quarry waste

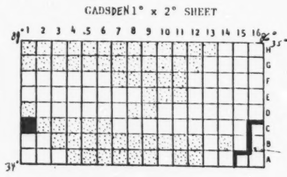
Gravel pits

g	site of gravel pit

Slides in man-made features

af	earth flow in fill
a/s	earth flow in strip castings
a/r	earth flow in coal refuse

GADSDEN 1° x 2° SHEET



Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

UPSHAW QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 6'2 SW

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS, NOAA, USGS, and TVA

Topography by photogrammetric methods from aerial photographs taken [illegible]. Field checked by [illegible]

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama [illegible]
coordinate system

ROAD CLASSIFICATION
Heavy duty — Four-wheel drive
Medium duty — Wagon and jeep trail
Light duty — Foot trail
Interstate Route — State Route

UPSHAW, ALA.
1960

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE UPSHAW, ALA. QUADRANGLE

by

John S. Pomeroy

1982

NOTE

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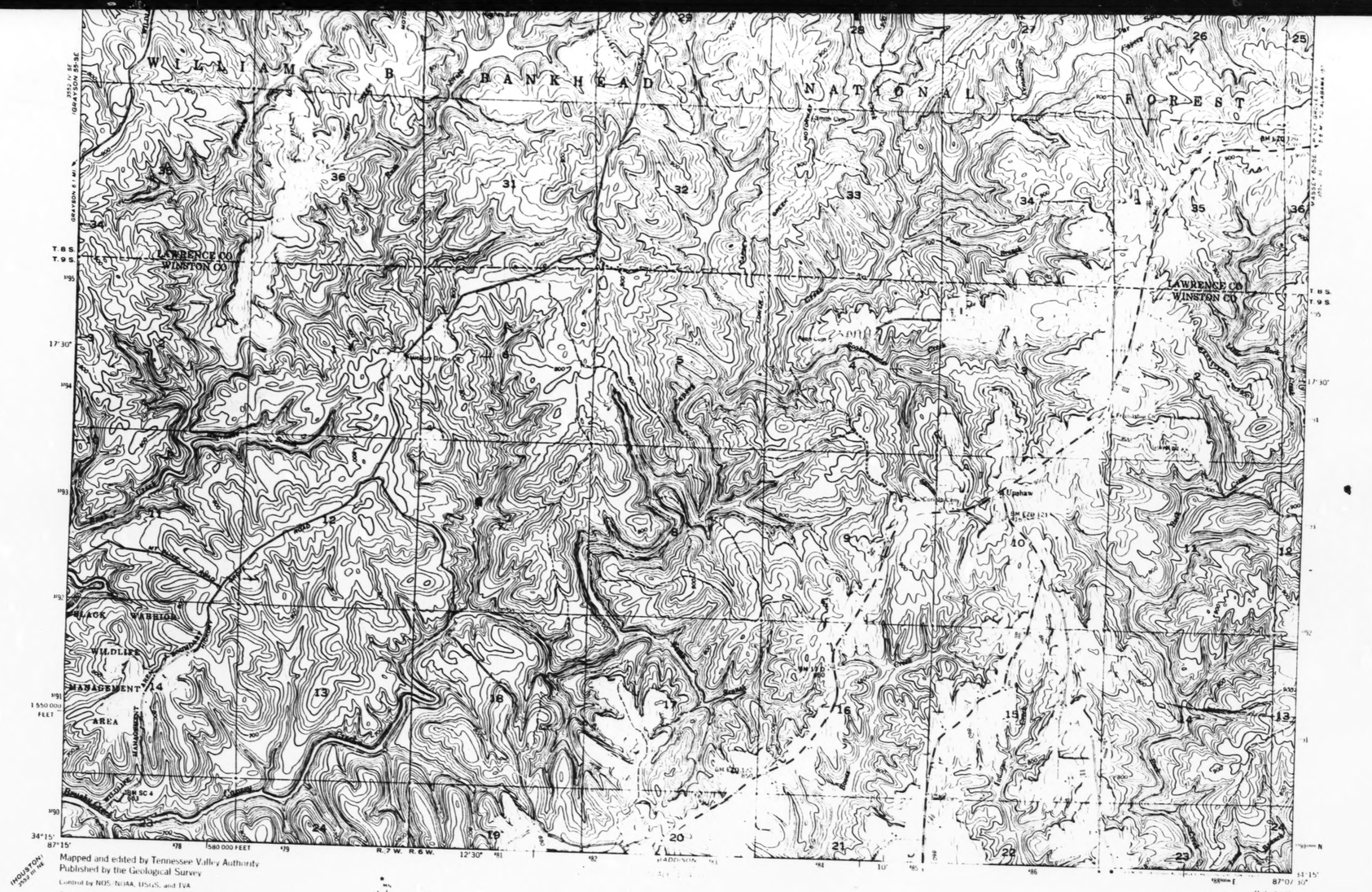

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS, NOAA, USGS, and TVA

Topography by photogrammetric methods using aerial photographs taken 1971. Map field checked by TVA, 1980

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama (West) rectangular coordinate system

ROAD CLASSIFICATION

Heavy duty — Poor motor road
Medium duty — Wagon and jeep track
Light duty — Foot trail
U.S. Route — State Route

TENNESSEE

UPSHAW, ALA.

1960

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S Geological Survey editorial standards

ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE UPSHAW, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (C-7)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

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MAN-MADE FEATURES
Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)
- sh — bench with high wall
- sf — furrowed with high wall
- sd — multiple furrows and multiple benches
- ss — hilltop removed
- srg — reclaimed by grading
- sru — reclaimed by secondary use
- sh/r — regraded in part, high wall remains

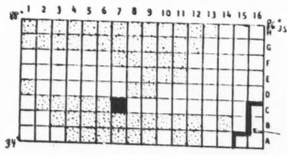
Coal refuse banks
- r — identified on aerial photographs; not classified in field check
- rb — not burnt nor on fire
- rbb — burnt
- rbd — burning
- rbs — sludge

Quarries
- q — quarry site
- qub — spoil bank, quarry waste

Gravel pits
- g — site of gravel pit

Slides in man-made features
- af — earth flow in fill
- a/s — earth flow in strip castings
- a/r — earth flow in coal refuse

GADSDEN 1° x 2° SHEET



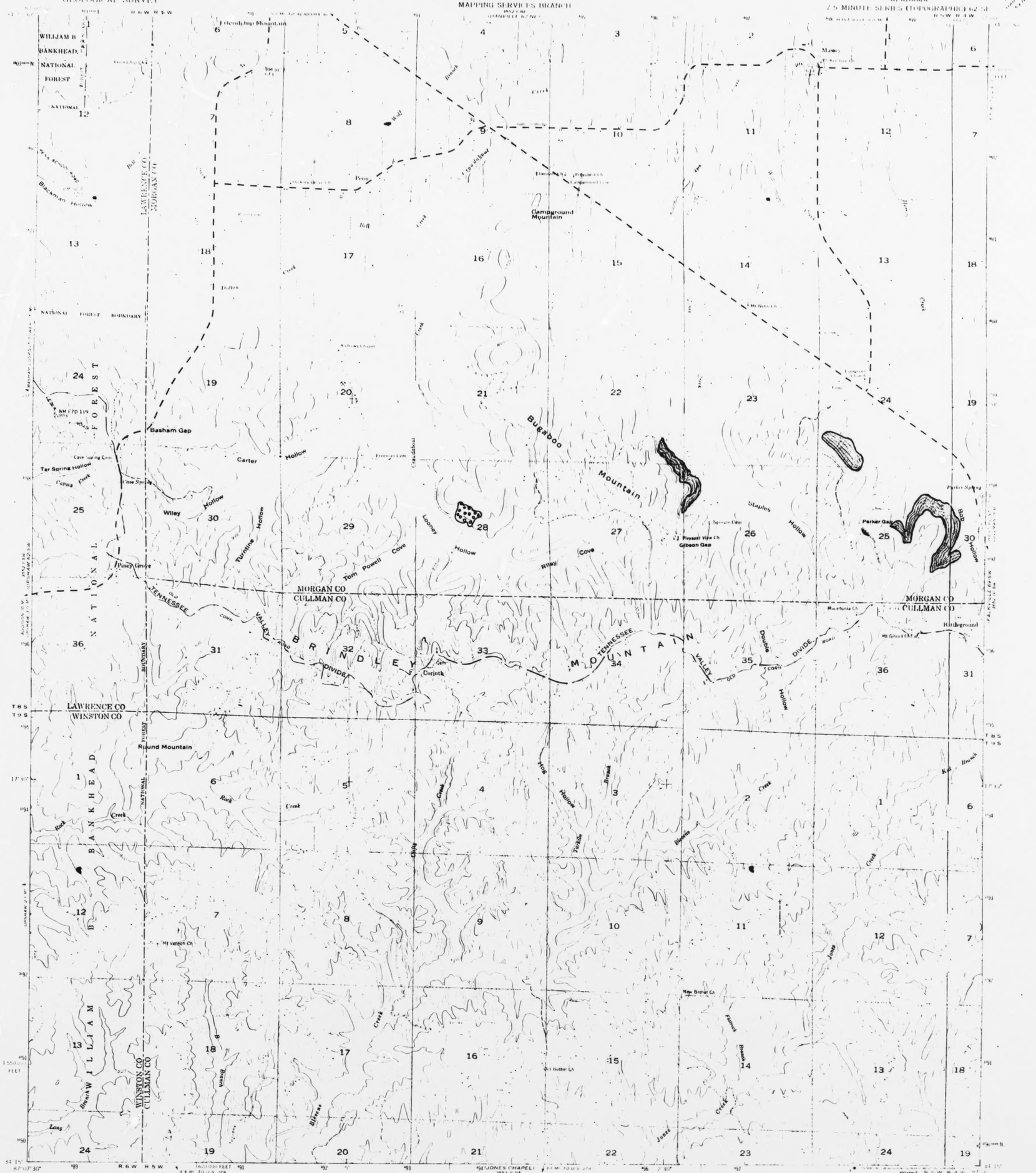
Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

MASSEY QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 62 SE



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey
Control by NOS, NOAA, USGS, and TVA
Topography by photogrammetric methods using aerial photographs taken 1950. Map field checked by TVA, 1980
Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama coordinate system
1000-meter Universal Transverse Mercator grid ticks

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT SUPPLEMENTARY CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

MASSEY, ALA.

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S. Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE MASSEY, ALA. QUADRANGLE

by

John S. Pomeroy

1982

NOTE

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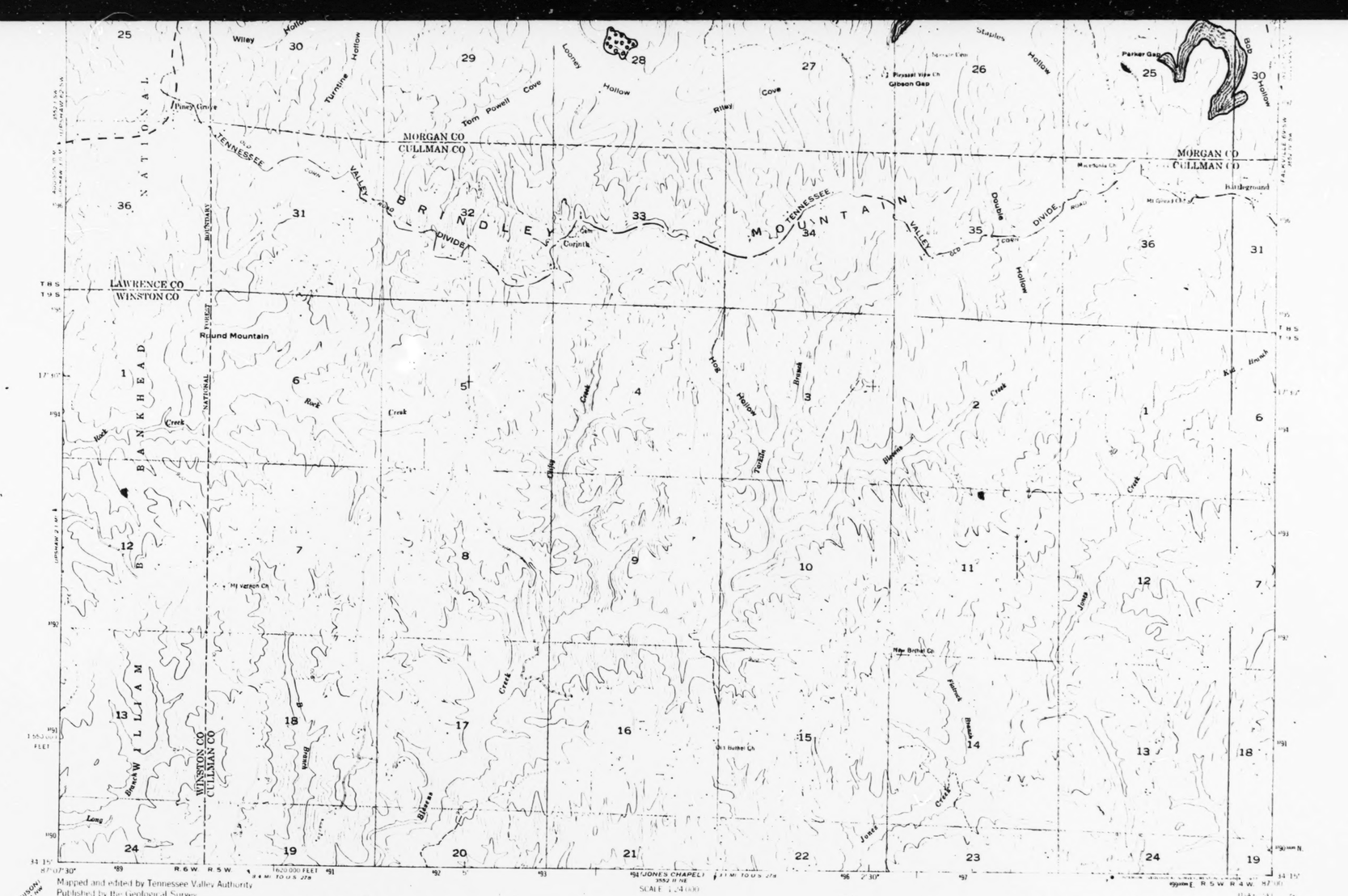

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE MASSEY, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (C-8)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol & designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

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MAN-MADE FEATURES
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- sh bench with high wall
- sf furrowed with high wall
- sd multiple furrows and multiple benches
- ss hilltop removed
- srg reclaimed by grading
- sru reclaimed by secondary use
- sh/r regraded in part, high wall remains

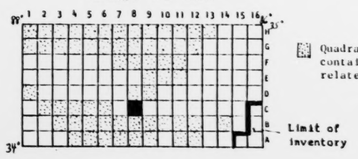
Coal refuse banks
- r identified on aerial photographs; not classified in field check
- rb not burnt nor on fire
- rbb burnt
- rbd burning
- rbs sludge

Quarries
- q quarry site
- qub spoil bank, quarry waste

Gravel pits
- g site of gravel pit

Slides in man-made features
- af earth flow in fill
- a/s earth flow in strip castings
- a/r earth flow in coal refuse

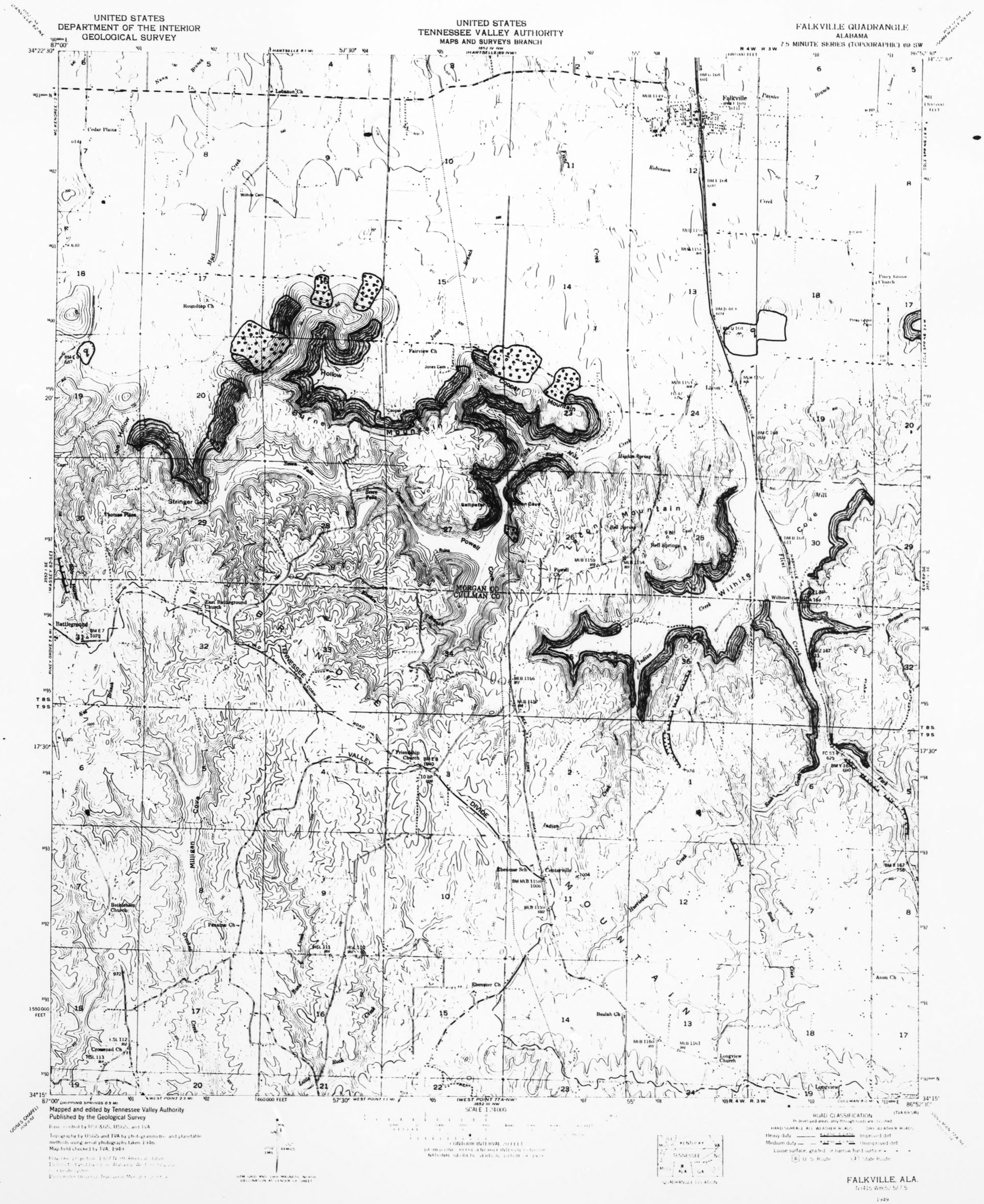
GADSDEN 1° x 2° SHEET



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

FALKVILLE QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 69 SW


Falkville
Lebanon Ch
Cedar Plains
Roundtop Ch
Fairview Ch
Jones Cem
Stringer Cem
Thomas Place
Saltpetre Cave
Powell
Bell Springs
Mill Cove
Piney Grove Church
East Battleground Church
Battleground
Friendship Church
Ebenezer Sch
Centerville
Bethlehem Church
Pevaina Ch
Ebenezer Ch
Beulah Ch
Crossroad Ch
Longview Church
Longview
Anou Ch
Burr Mountain
Sand Mountain
MORGAN CO
CULLMAN CO
TENNESSEE VALLEY
DIVIDE
Wilhite
Indian
Millican
Harrison
Hughes Spring
Piney Grove
Mill Cove
Rock
Powell

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Base control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric and planetable methods using aerial photographs taken 1940.
Map field checked by TVA, 1949

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama coordinate system
1000-meter Universal Transverse Mercator grid, zone 16

UTM GRID AND 1968 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

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LANDSLIDES AND RELATED FEATURES

OF THE FALKVILLE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (C-9)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

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Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

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MAN-MADE FEATURES

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- sf furrowed with high wall
- sd multiple furrows and multiple benches
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- srg reclaimed by grading
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- sh/r regraded in part, high wall remains

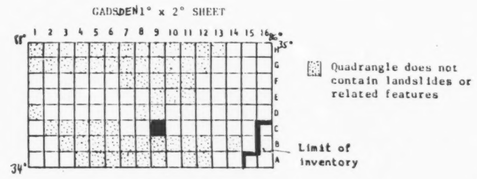
Coal refuse banks
- r identified on aerial photographs; not classified in field check
- rb not burnt nor on fire
- rbb burnt
- rbd burning
- rbs sludge

Quarries
- q quarry site
- qub spoil bank, quarry waste

Gravel pits
- g site of gravel pit

Slides in man-made features
- af earth flow in fill
- a/s earth flow in strip castings
- a/r earth flow in coal refuse

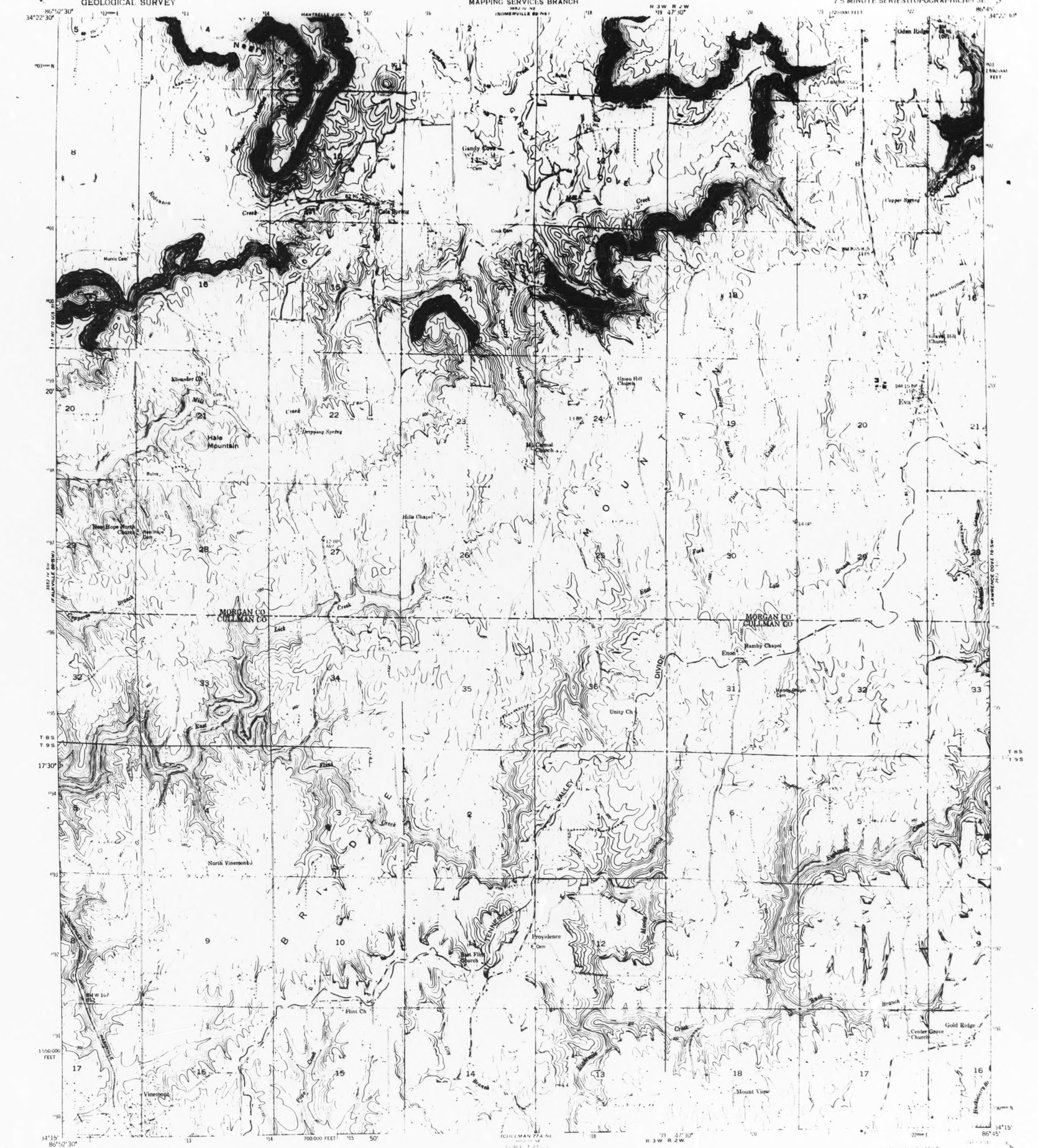
GADSDEN 1° x 2° SHEET



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

EVA QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS, NOAA, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods using aerial photographs taken 1948
Map field checked by TVA, 1949

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama coordinate system, east zone
1000-meter Universal Transverse Mercator grid ticks
Zone 16, shaded thus

ROAD CLASSIFICATION
Heavy Duty
Medium Duty
Light Duty
Interstate Route
U.S. Route
Unimproved Roads

EVA, ALA.
1949

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial

LANDSLIDES AND RELATED FEATURES

OF THE EVA, ALA. QUADRANGLE

by

NOTE

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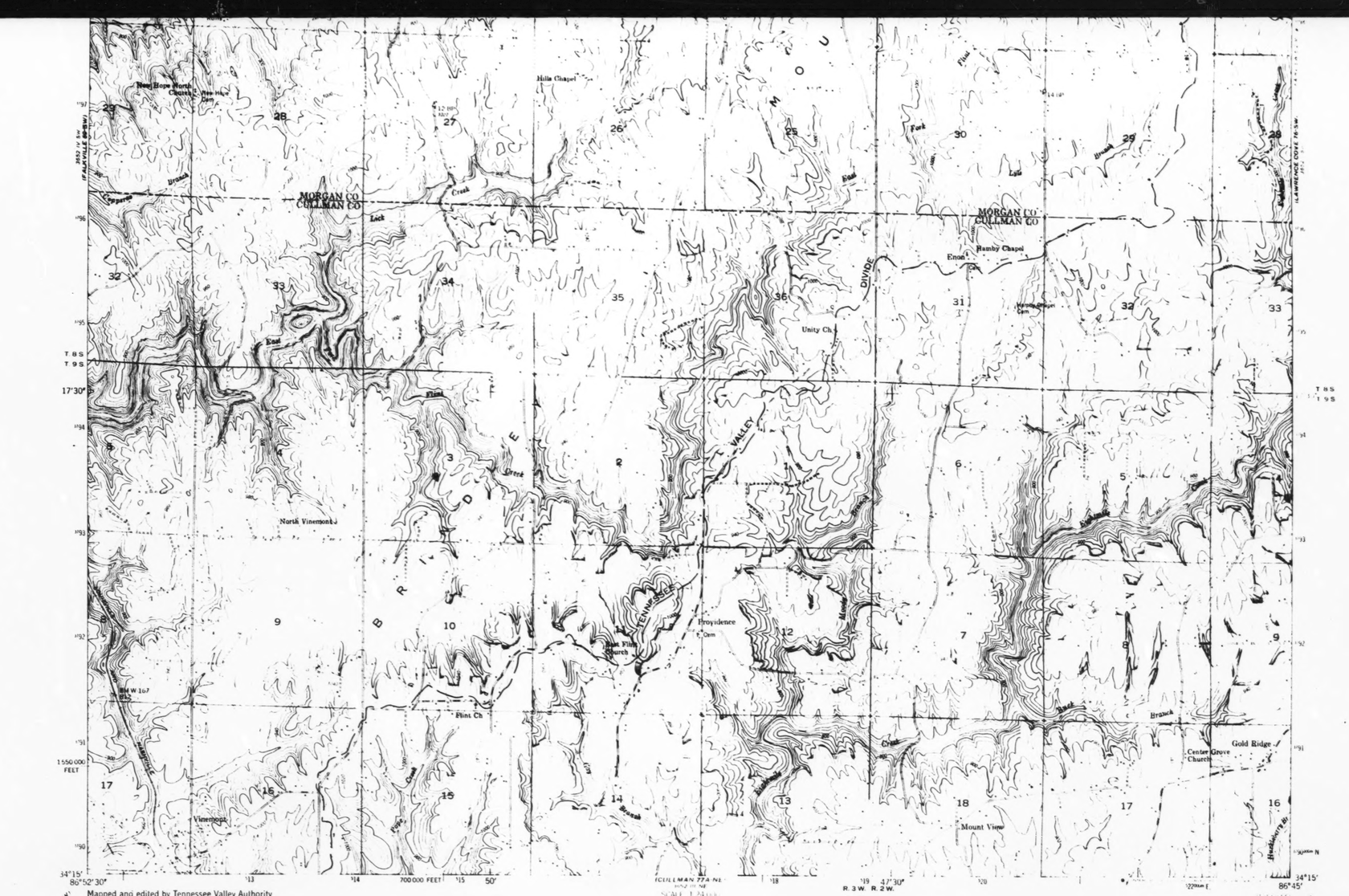

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS, NOAA, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods using aerial photographs taken 1948
Map field checked by TVA, 1949

Polyconic projection, 1927 North American datum
10,000-foot grid ticks on Alabama (West) coordinate system
1000-meter Universal Transverse Mercator grid ticks, Zone 16, shown in blue

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION
Heavy duty — Medium duty — Light duty
Poor motor road
Wagon and jeep track
Foot trail
U.S. Route
State Route
Interstate routes and through roads are classified

EVA, ALA.
N3415 W8645/7.5
1949

AMS 3956 I SE-(EVA)-24K

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial standards

ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE EVA, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (C-10)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type strip mine)

s	bench with high wall
sf	furrowed with high wall
sd	multiple furrows and multiple benches
ss	hilltop removed
srg	reclaimed by grading
sru	reclaimed by secondary use
sh/r	regraded in part, high wall remains

Coal refuse banks

r	identified on aerial photographs; not classified in field check
rb	not burnt nor on fire
rbb	burnt
rbd	burning
rbs	sludge

Quarries

q	quarry site
qub	spoil bank, quarry waste

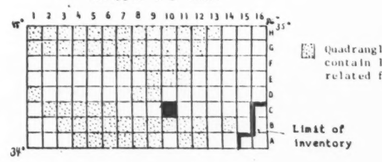
Gravel pits

g	site of gravel pit

Slides in man-made features

af	earth flow in fill
a/s	earth flow in strip castings
a/r	earth flow in coal refuse

GADSDEN 1° x 2° SHEET



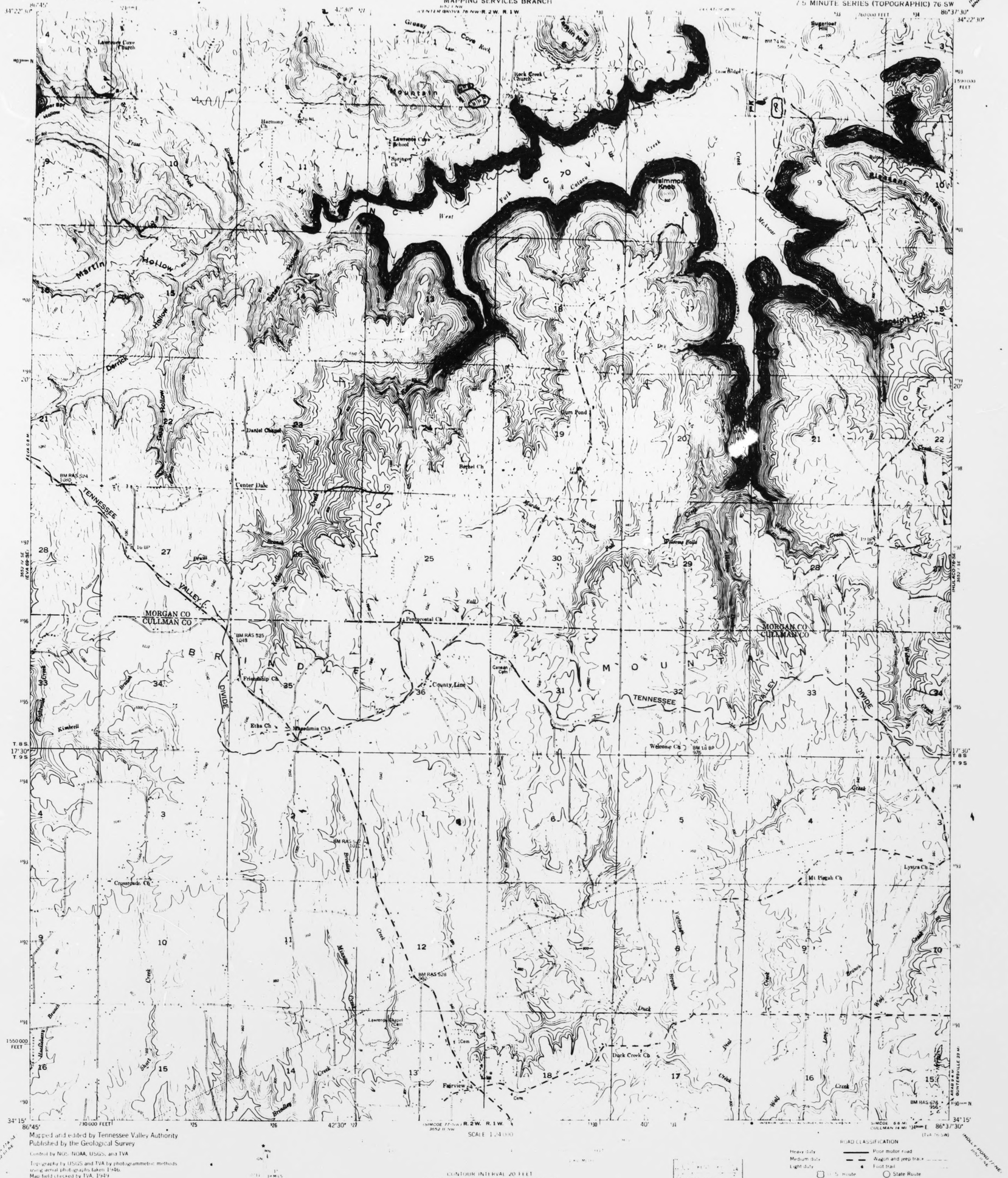
Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

LAWRENCE COVE QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 76 SW



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS, NOAA, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods from aerial photographs taken 1948.
Map field checked by TVA, 1949

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (West) rectangular coordinate system
1000 meter Universal Transverse Mercator grid ticks, Zone 16, shown in blue

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
DASHED LINE REPRESENTS HALF INTERVAL CONTOUR
NATIONAL GEODETIC VERTICAL DATUM OF 1929

UTM GRID AND 1975 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

ROAD CLASSIFICATION

Heavy duty	Poor motor road
Medium duty	Wagon and jeep trail
Light duty	Foot trail
U.S. Route	State Route

LAWRENCE COVE, ALA.
34415-Wes8737.5/7.5
1949

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE LAWRENCE COVE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

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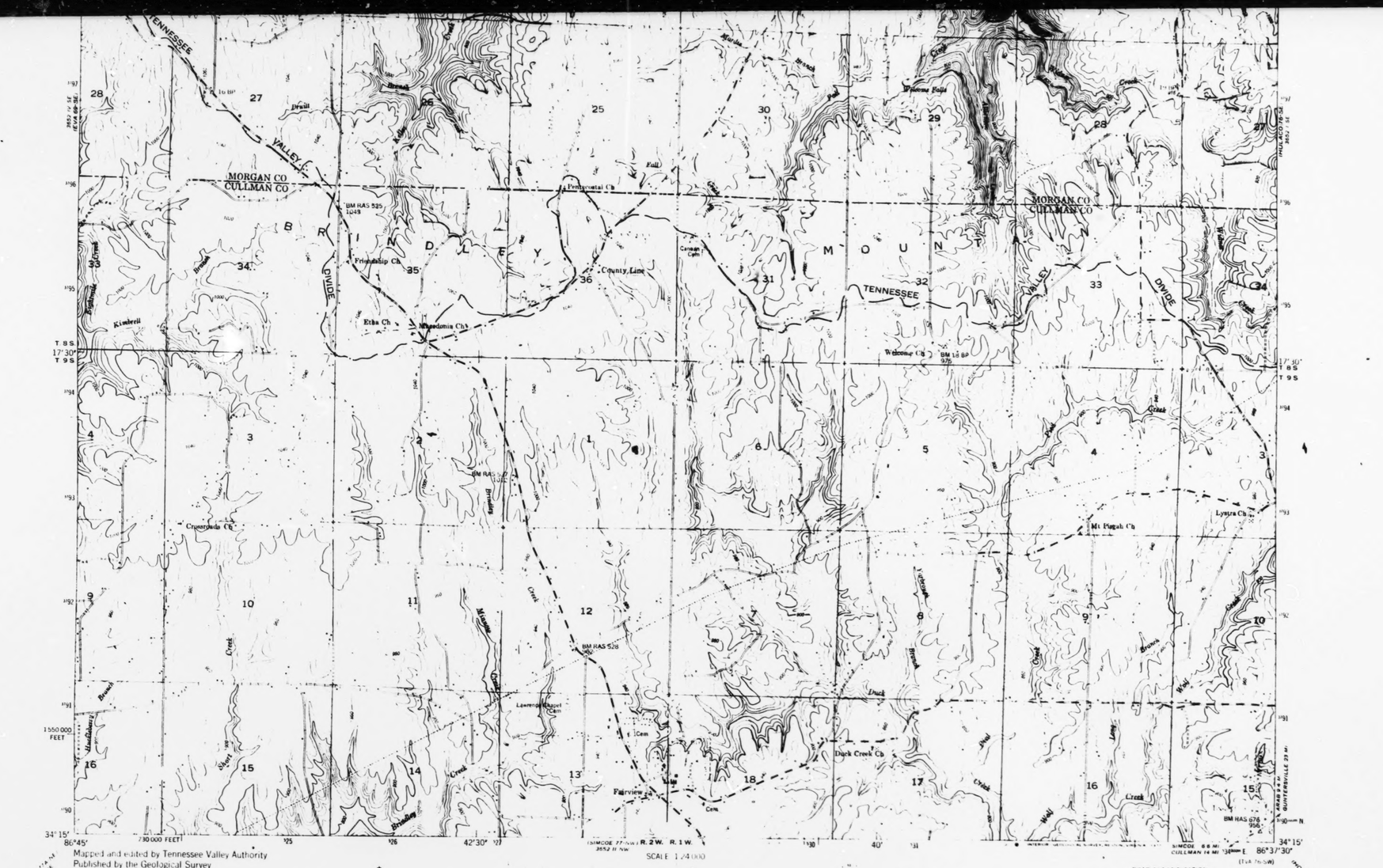

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS, NOAA, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods using aerial photographs taken 1946
Map field checked by TVA, 1949

Polyconic projection, 1927 North American datum
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1000 metre Universal Transverse Mercator grid ticks Zone 16, shown in blue

ROAD CLASSIFICATION

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U. S. Route	State Route

QUADRANGLE LOCATION

LAWRENCE COVE, ALA.

N3415.W8637.5/7.5

1949

AMS 6957 I SW-SERIES V844

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1:40,000 (black and white) 1978

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LANDSLIDES AND RELATED FEATURES

OF THE LAWRENCE COVE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (G-11)

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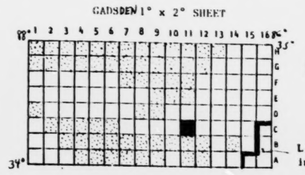


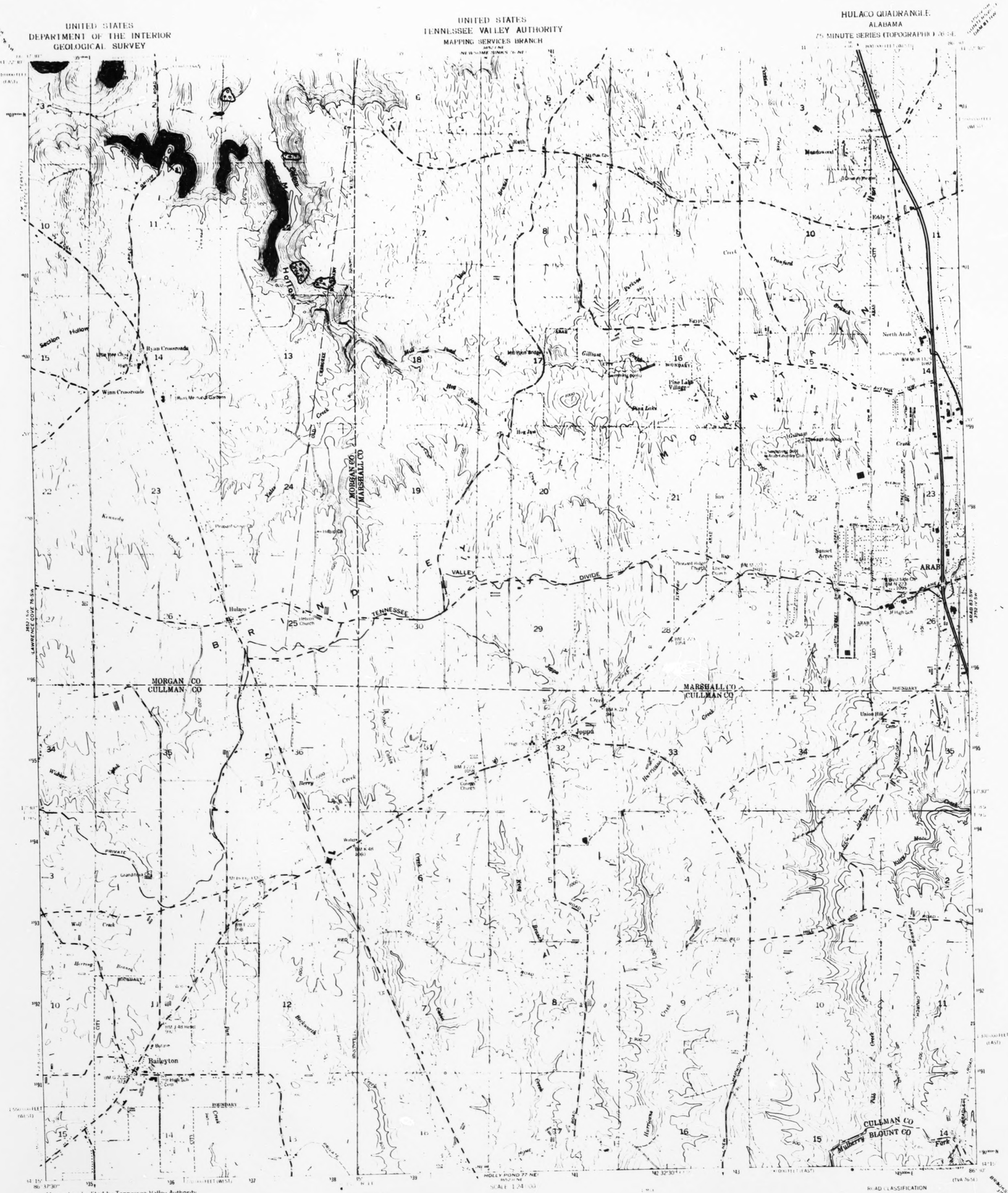
Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

HULACO QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS/NOAA, USGS, and TVA

Revised by TVA in 1975 by photogrammetric methods using aerial photographs taken 1975 and by reference to TVA-USGS quadrangle dated 1952. Map field checked by TVA, 1976

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) and Alabama (West) rectangular coordinate systems
1000 metre Universal Transverse Mercator grid ticks, Zone 16, shown in blue

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION

Heavy duty	Four motor road
Medium duty	Wagon and jeep track
Light duty	Foot trail
U.S. Route	State Route

In developed areas, only through roads are classified

HULACO, ALA.
1976

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/U.S.Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE HULACO, ALA. QUADRANGLE

by

John S. Pomeroy

1982

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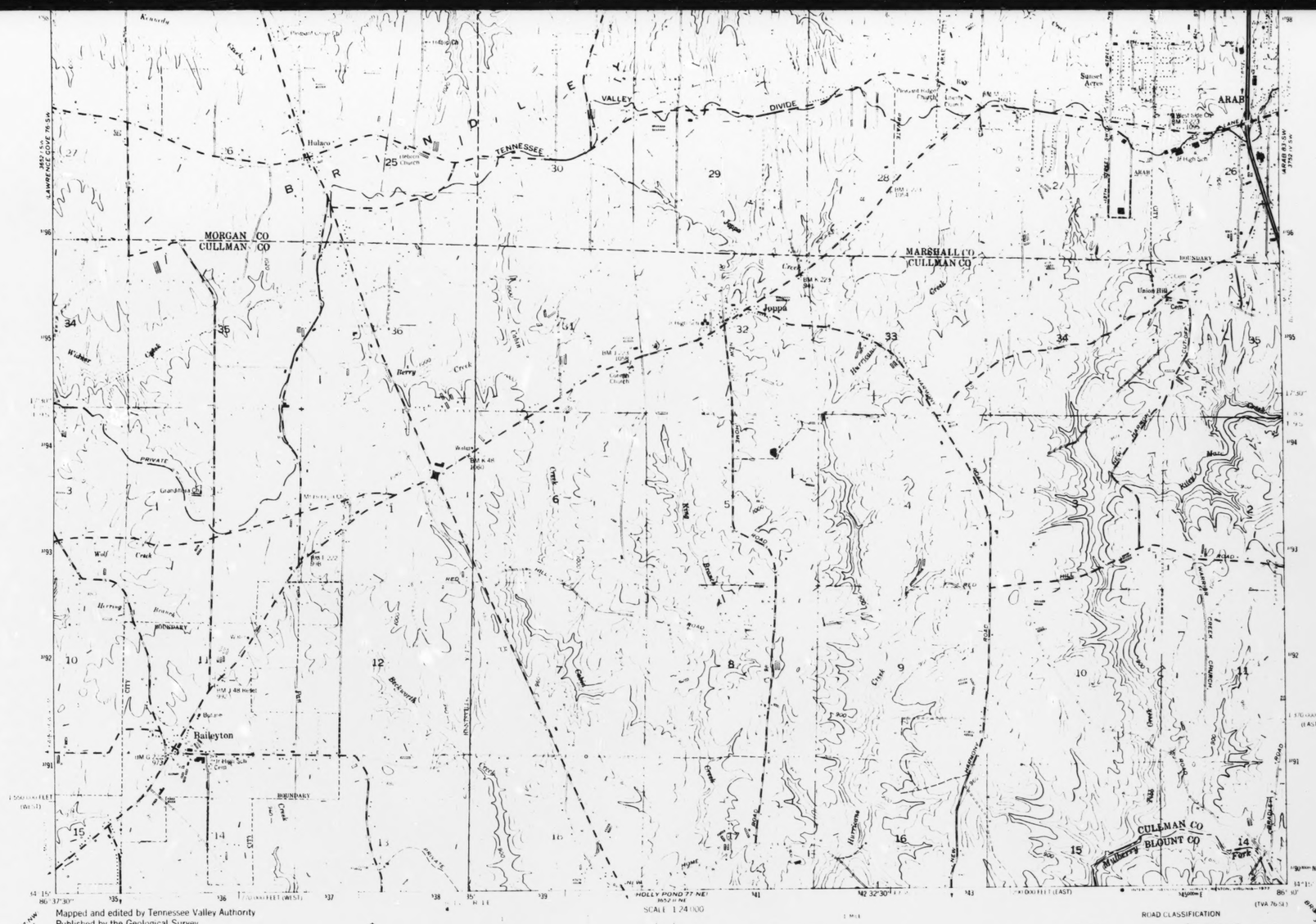

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Revised by TVA in 1975 by photogrammetric methods using aerial photographs taken 1975 and by reference to TVA USGS quadrangle dated 1952. Map field checked by TVA, 197c

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CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

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OF THE HULACO, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (C-12)

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- sh — bench with high wall
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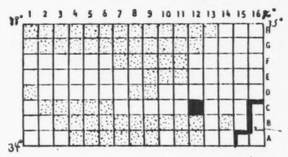
GADSDEN 1° x 2° SHEET



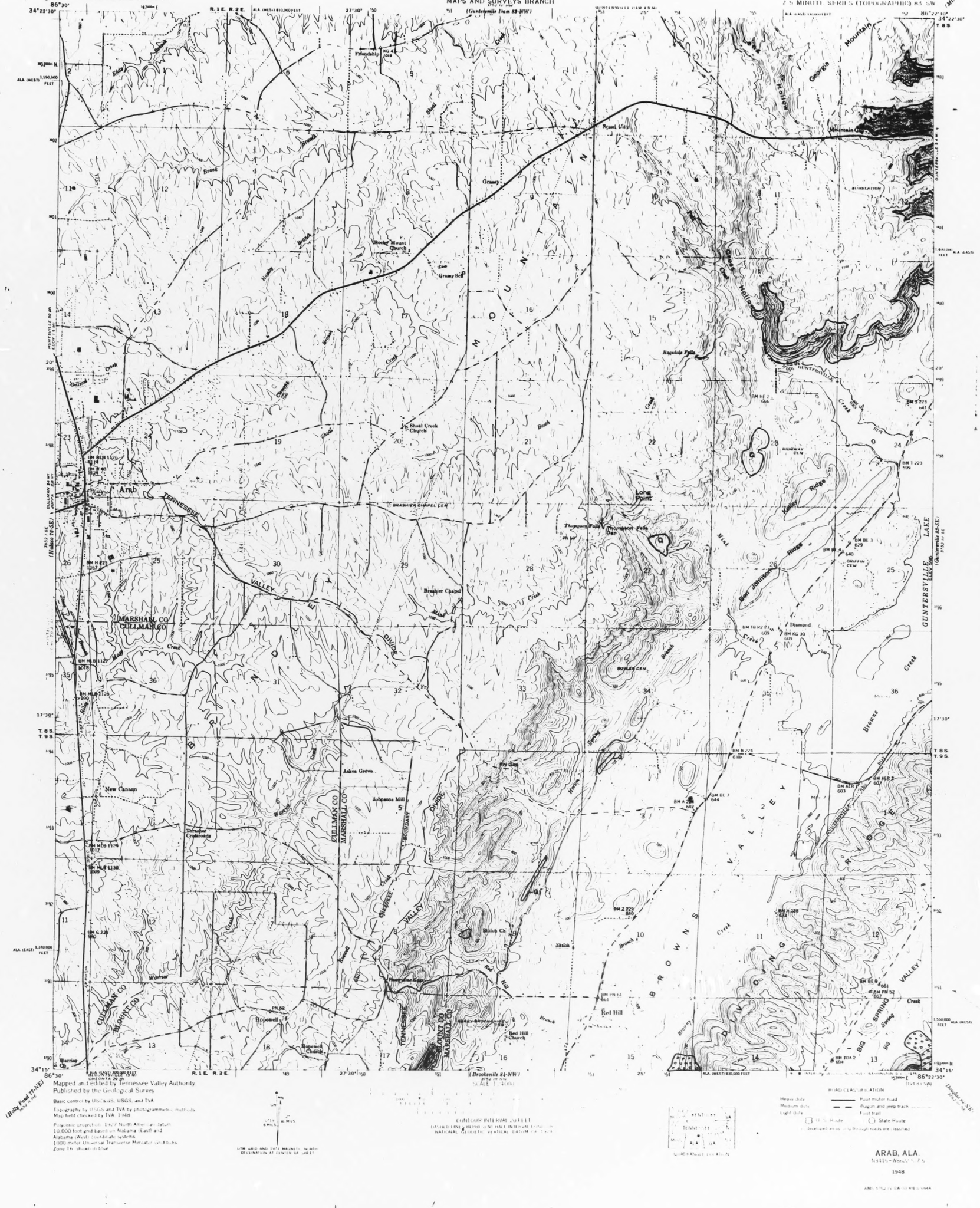
Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

ARAB QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 83 SW



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Basic control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods
Map field checked by TVA 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) and
Alabama (West) coordinate systems
1000 meter Universal Transverse Mercator grid ticks
Zone 16, shown in blue

CONTOUR INTERVAL 20 FEET
DASHED LINE REPRESENTS SUPPLEMENTARY CONTOUR
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION
Heavy duty — Four motor road
Medium duty — Wagon and jeep track
Light duty — Foot trail
U.S. Route — State Route

ARAB, ALA.
1948

Landslides and related features interpreted from aerial photographs:

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1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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LANDSLIDES AND RELATED FEATURES

OF THE ARAB, ALA. QUADRANGLE

by

John S. Pomeroy

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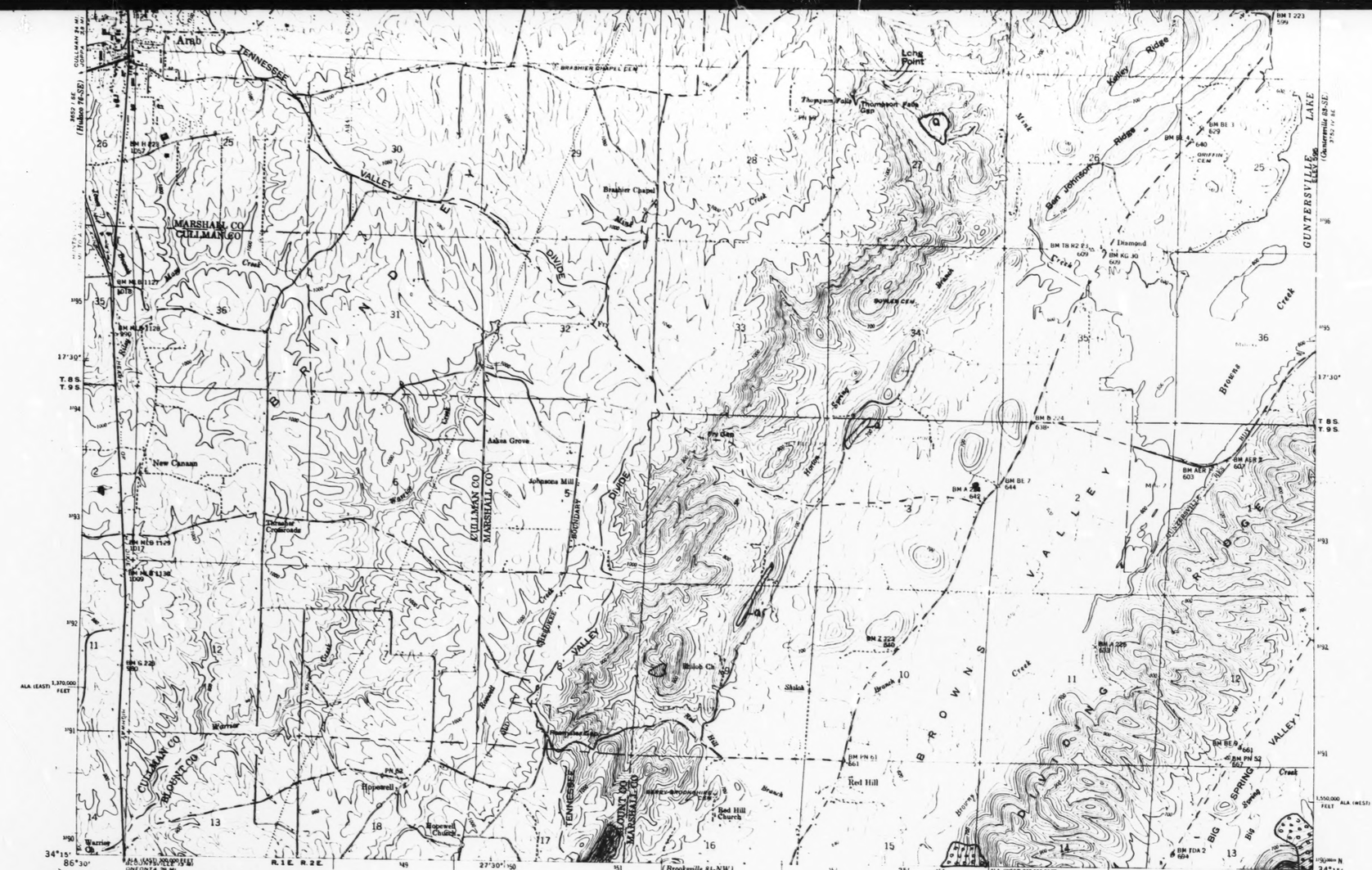

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SCALE 1:24000

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UTM GRID AND 1973 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Heavy duty	Poor motor road
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U.S. Route	State Route

Unimproved roads and trails through developed areas only through roads are classified

ARAB, ALA.

N3415—W8630/7.5

1948

AMS 5752 IV SW-SERIES V844

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U.S. Geological Survey

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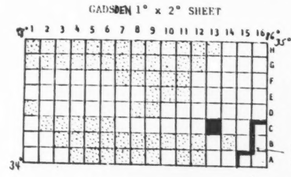

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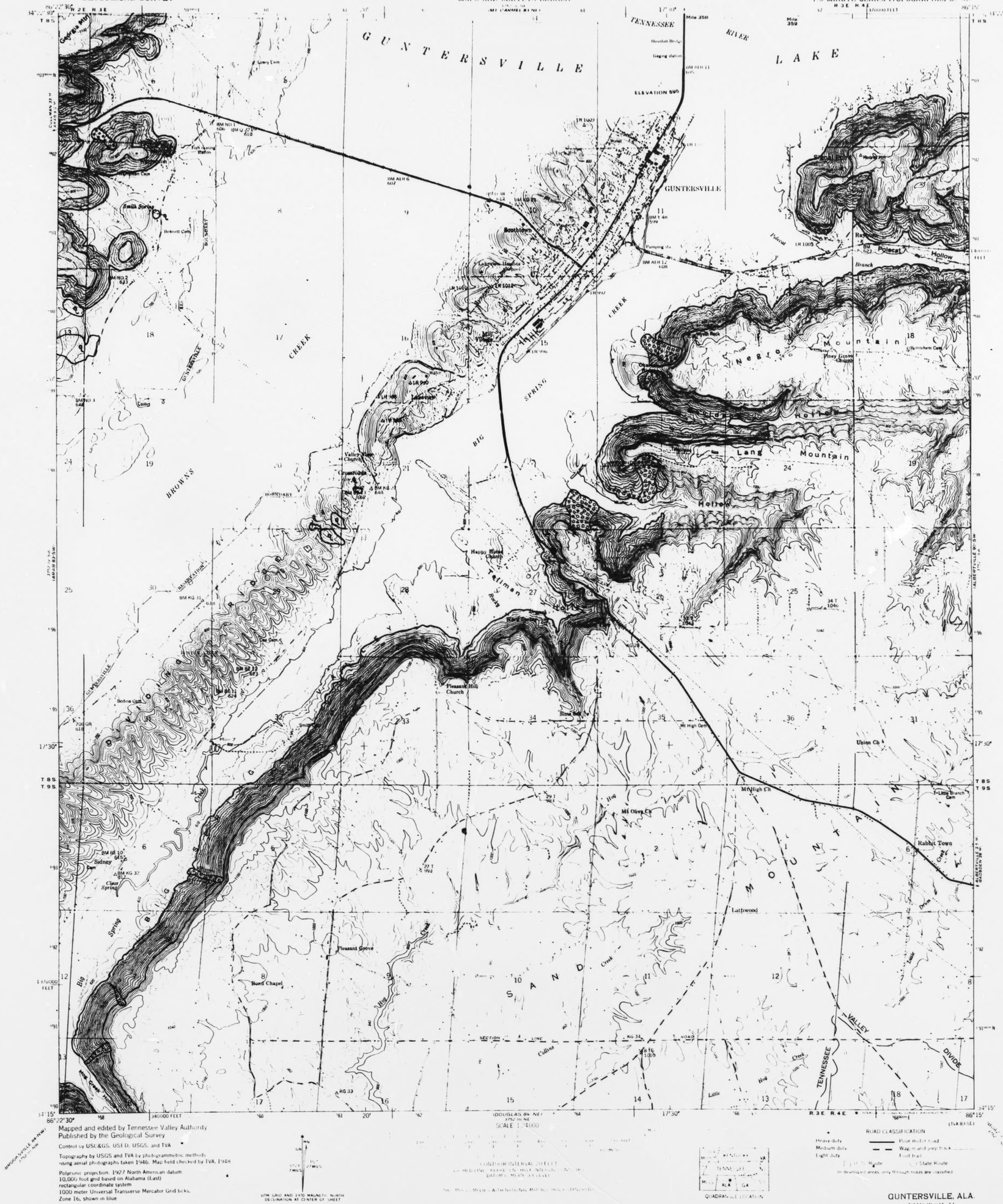
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

GUNTERSVILLE QUADRANGLE
ALABAMA MARSHALL CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USED, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods
using aerial photographs taken 1946. Map field checked by TVA, 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East)
rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks,
Zone 16, shown in blue

SCALE 1:24000

UTM GRID AND 1970 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

ROAD CLASSIFICATION

Heavy duty — Four-wheel road
Medium duty — Wagon and jeep trail
Light duty — Foot trail
U.S. Route — State Route

In downgraded areas, only through roads are classified

QUADRANGLE LOCATION

GUNTERSVILLE, ALA.
N3415 Wm15 7.5
1948

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE GUNTERSVILLE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

NOTE

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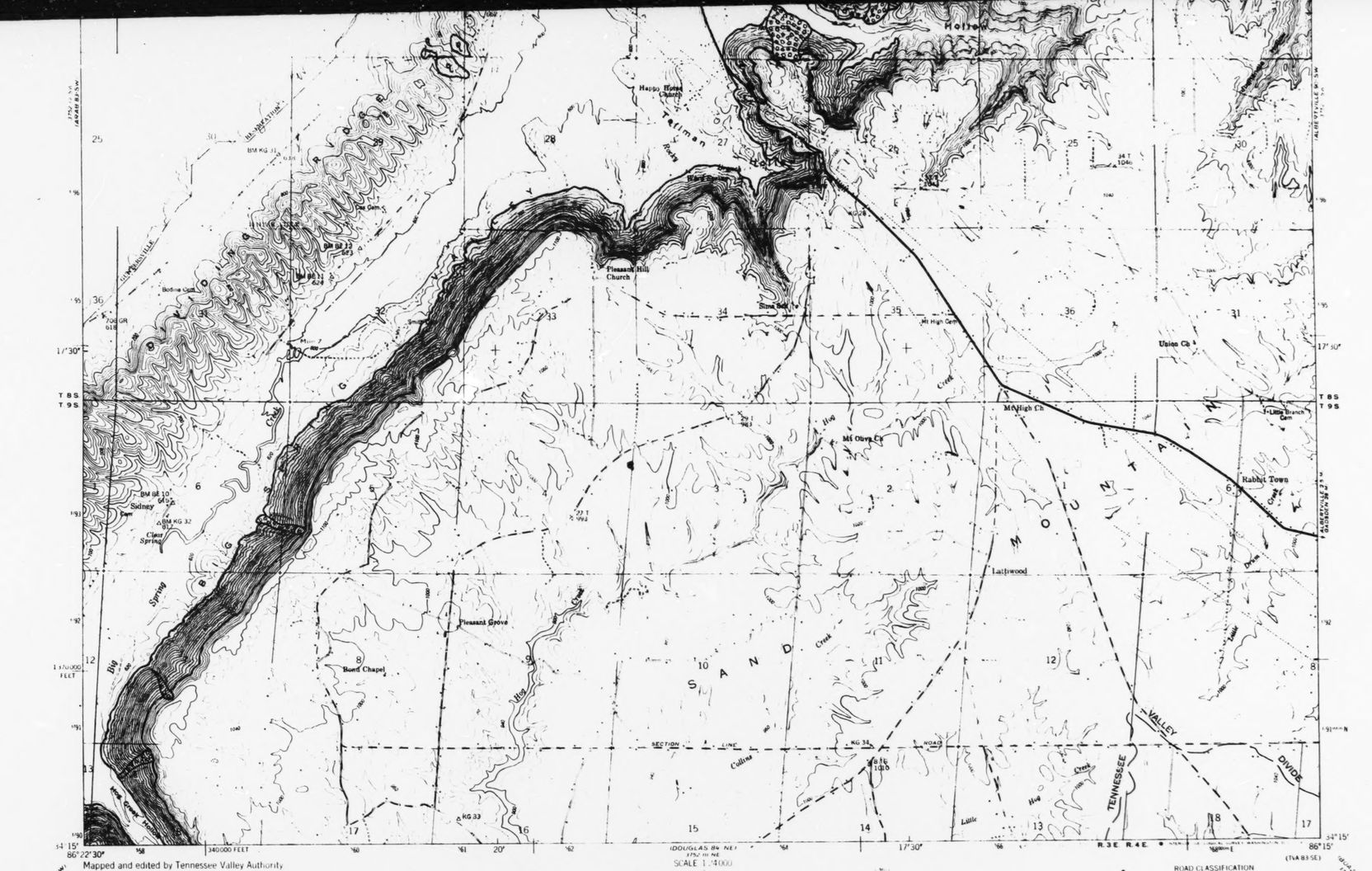

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Published by the Geological Survey

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Topography by USGS and TVA by photogrammetric methods using aerial photographs taken 1946. Map field checked by TVA, 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks, Zone 16, shown in blue

UTM GRID AND 1970 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

CONTOUR INTERVAL 20 FEET
DOTTED LINES ARE 10 FOOT INTERVAL CONTOURS
DATUM IS MEAN SEA LEVEL

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Heavy duty	Poor motor road
Medium duty	Wagon and jeep track
Light duty	Foot trail
Route	State Route

In developed areas, only through roads are classified

GUNTERSVILLE, ALA.

N3415 W8615 7.5

1948

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE GUNTERSVILLE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (C-14)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

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MAN-MADE FEATURES
Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

sh	bench with high wall
sf	furrowed with high wall
sd	multiple furrows and multiple benches
ss	hilltop removed
srg	reclaimed by grading
sru	reclaimed by secondary use
sh/r	regraded in part, high wall remains

Coal refuse banks

r	identified on aerial photographs; not classified in field check
rb	not burnt nor on fire
rbb	burnt
rbd	burning
rbs	sludge

Quarries

q	quarry site
qub	spoil bank, quarry waste

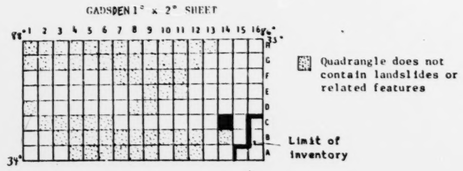
Gravel pits

g	site of gravel pit

Slides in man-made features

af	earth flow in fill
a/s	earth flow in strip castings
a/r	earth flow in coal refuse

GADSDEN 1° x 2° SHEET



Quadrangle does not contain landslides or related features

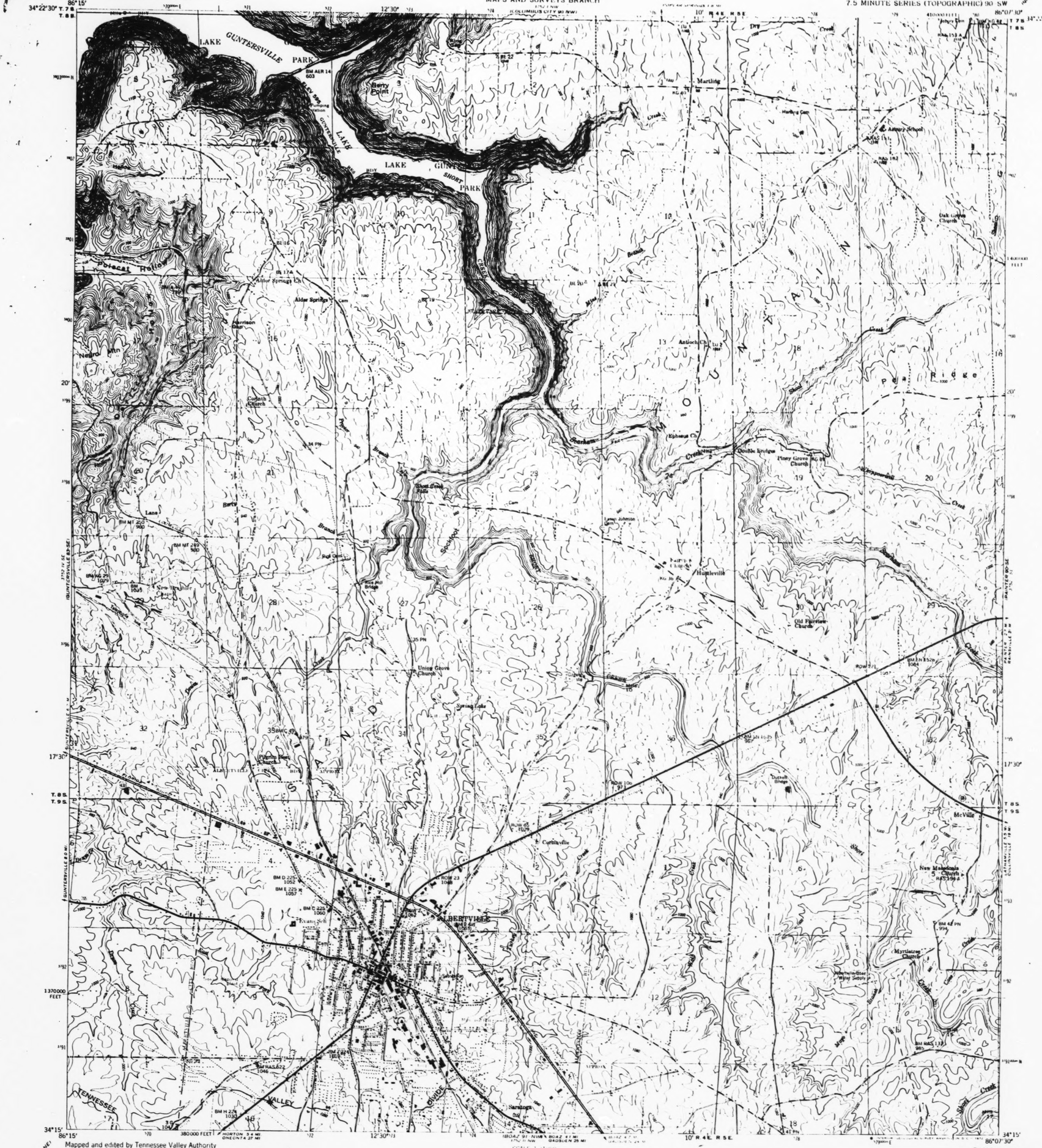
Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

ALBERTVILLE QUADRANGLE

ALABAMA MARSHALL CO.
7.5 MINUTE SERIES (TOPOGRAPHIC) 90 SW


LAKE GUNTERSVILLE
PARK
Berry Point
LAKE GUNTERSVILLE
LAKE GUNTERSVILLE
SHORE PARK
Potecat Hollow
Alder Springs
Negro Mtn
Cobbs Church
Harrison Gap
Short Creek Ridge
Berry Lane
Union Grove Church
Spring Lake
Pleasant Hope Church
Curbyville
ALBERTVILLE
Evans Sch
Sardis Church
Saratoga
TENNESSEE VALLEY DIVIDE
Ephesus Ch
Double Bridges
Piney Grove Church
Huntleville
Old Fairview Church
Antioch Ch
Pea Ridge
Oak Grove Church
McVille
New Macedonia Church
Myrtletree Church
Short Creek
Paint Rock River
Paint Rock Ridge
Martling
Dry Creek
Harbin Cem
Asbury School
Brindle Creek
Durbell Bridge
Albertville Boaz Water Supply
Sand Creek
Mud Creek
Big Spring Branch
Sinking Creek
Lewis Johnson Cem
Pleasant Hope Church
Union Grove Church
Spring Lake
Evans Sch
Sardis Church
Saratoga
Old Fairview Church
Huntleville
Ephesus Ch
Double Bridges
Piney Grove Church
Antioch Ch
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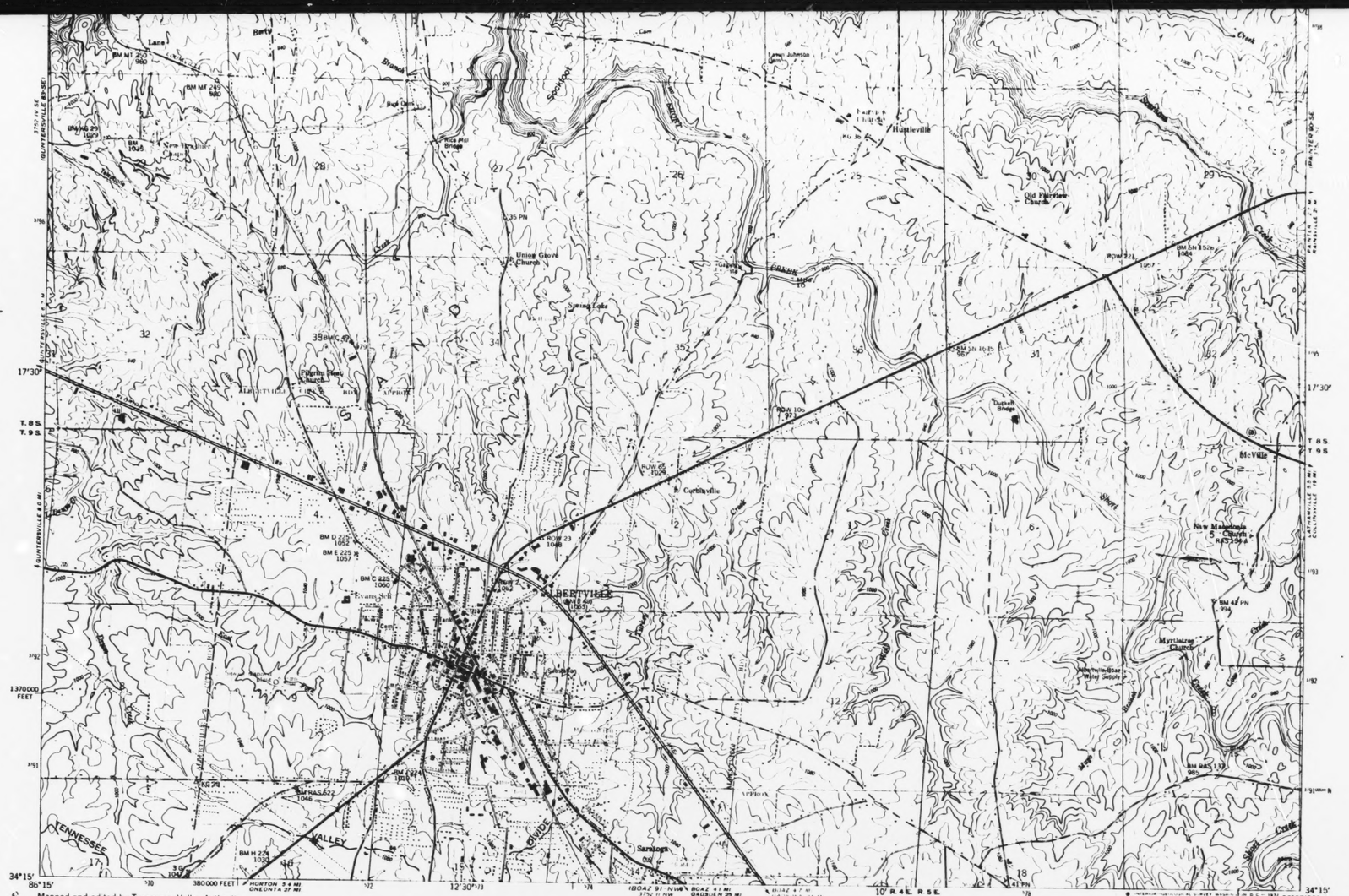
Curbyville
ALBERTVILLE
Evans Sch
Sardis Church
Saratoga
Ephesus Ch
Double Bridges
Piney Grove Church
Huntleville
Old Fairview



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods from aerial photographs taken 1944 and 1946.
Map field checked by TVA, 1947

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks, Zone 16, shown in blue

UTM GRID AND 1970 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE ALBERTVILLE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (C-15)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

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NOTE
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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

- sh bench with high wall
- sf furrowed with high wall
- sd multiple furrows and multiple benches
- ss hilltop removed
- srg reclaimed by grading
- sru reclaimed by secondary use
- sh/r regraded in part, high wall remains

Coal refuse banks

- r identified on aerial photographs; not classified in field check
- rb not burnt nor on fire
- rbb burnt
- rbd burning
- rbs sludge

Quarries

- q quarry site
- qub spoil bank, quarry waste

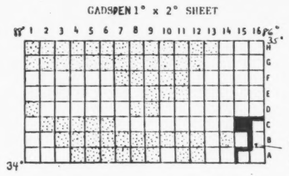
Gravel pits

- g site of gravel pit

Slides in man-made features

- af earth flow in fill
- a/s earth flow in strip castings
- a/r earth flow in coal refuse

GADSPEN 1° x 2° SHEET



Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S. Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE ISBELL, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

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Landslides and related features interpreted from aerial photographs:

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Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE ISBELL, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (D-2)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

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AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

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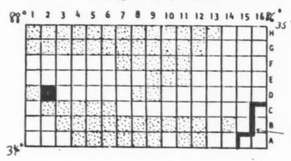
Coal refuse banks
- r identified on aerial photographs; not classified in field check
- rb not burnt nor on fire
- rbb burnt
- rbd burning
- rbs sludge

Quarries
- q quarry site
- qub spoil bank, quarry waste

Gravel pits
- g site of gravel pit

Slides in man-made features
- af earth flow in fill
- a/s earth flow in strip castings
- a/r earth flow in coal refuse

GADSDEN 1° x 2° SHEET



Quadrangle does not contain landslides or related features

Limit of inventory

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE SPRUCE PINE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (D-3)

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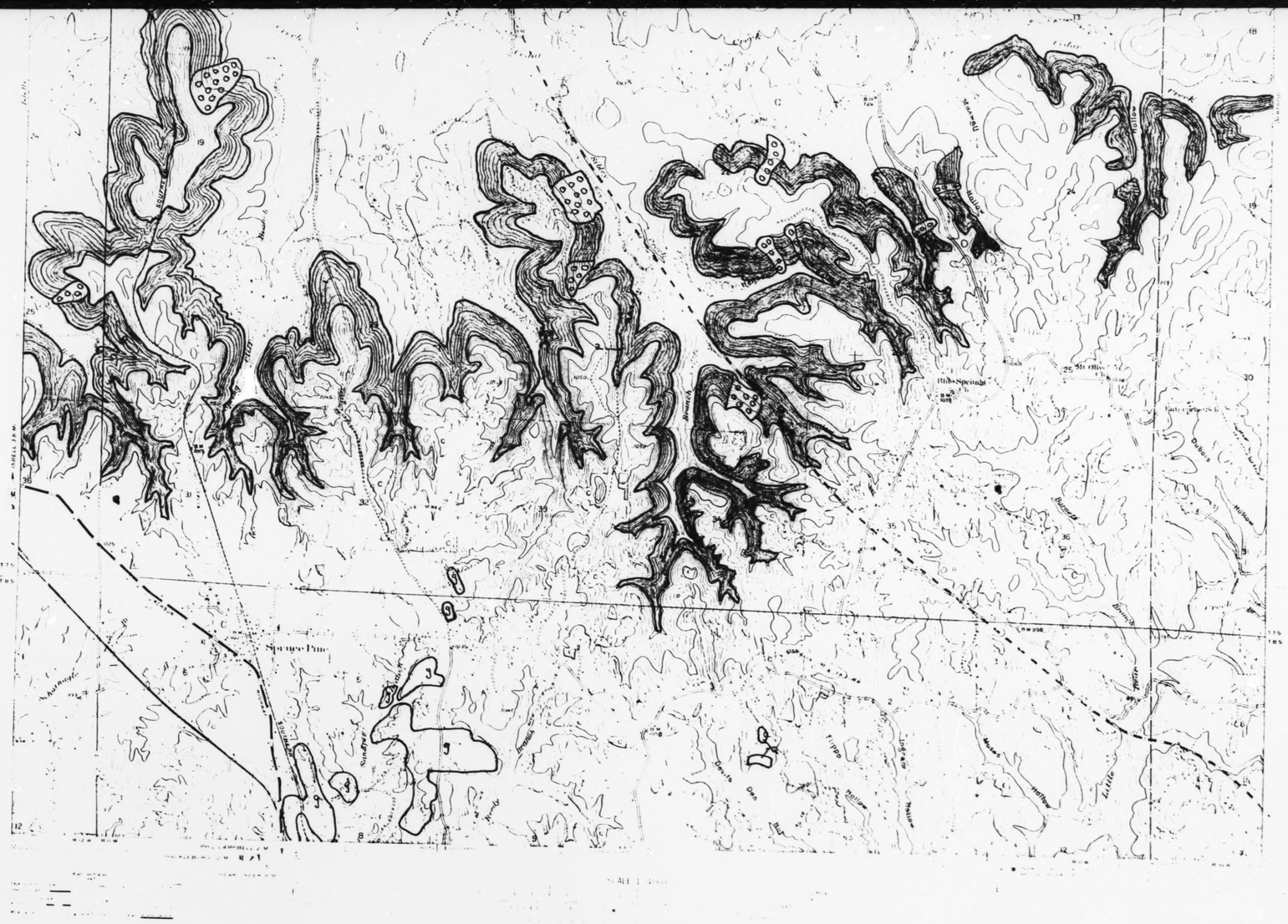
MAN-MADE FEATURES

Strip mines (combination of letter symbols



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1:40,000 (black and white) 1978

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LANDSLIDES AND RELATED FEATURES

OF THE SPRUCE PINE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (D-3)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
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rbs	sludge

Quarries

q	quarry site
qub	spoil bank, quarry waste

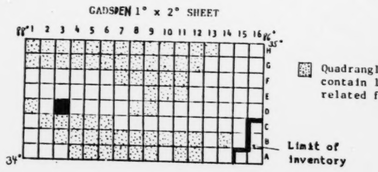
Gravel pits

g	site of gravel pit

Slides in man-made features

af	earth flow in fill
a/s	earth flow in strip castings
a/r	earth flow in coal refuse

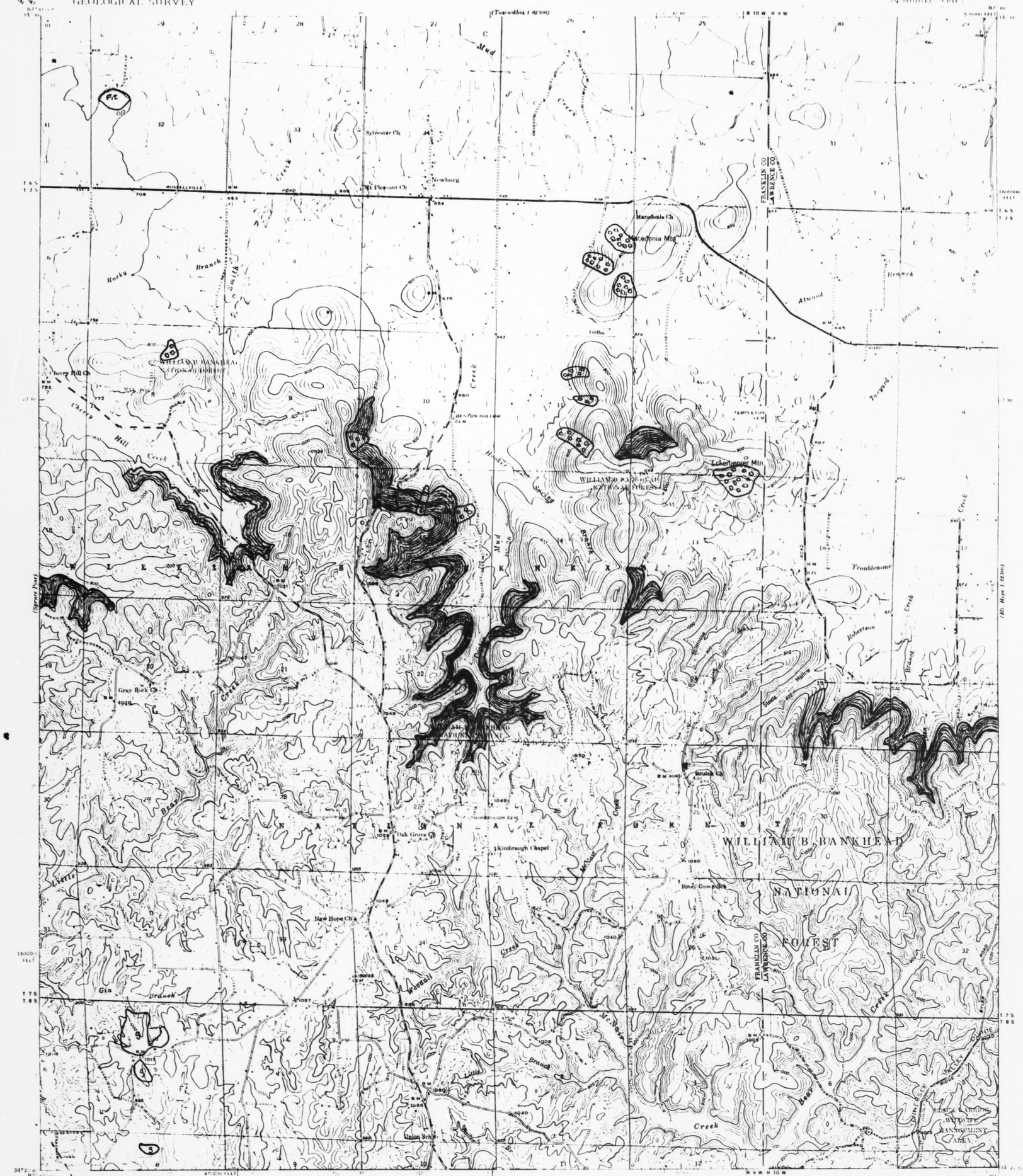
GADSDEN 1° x 2° SHEET



Quadrangle d
contain la
related feat

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ALABAMA
NEWBURG QUADRANGLE
7½ MINUTE SERIES



Mapped by the Geological Survey
1945

Contour interval 20 feet
Datum is mean sea level

Polyconic projection. 1927 North American datum
10000 foot grid based on Alabama (West)
rectangular coordinate system

NEWBURG, ALA.
N3422.5—W8752.5/7.5
1945

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE NEWBURG, ALA QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

NOTE

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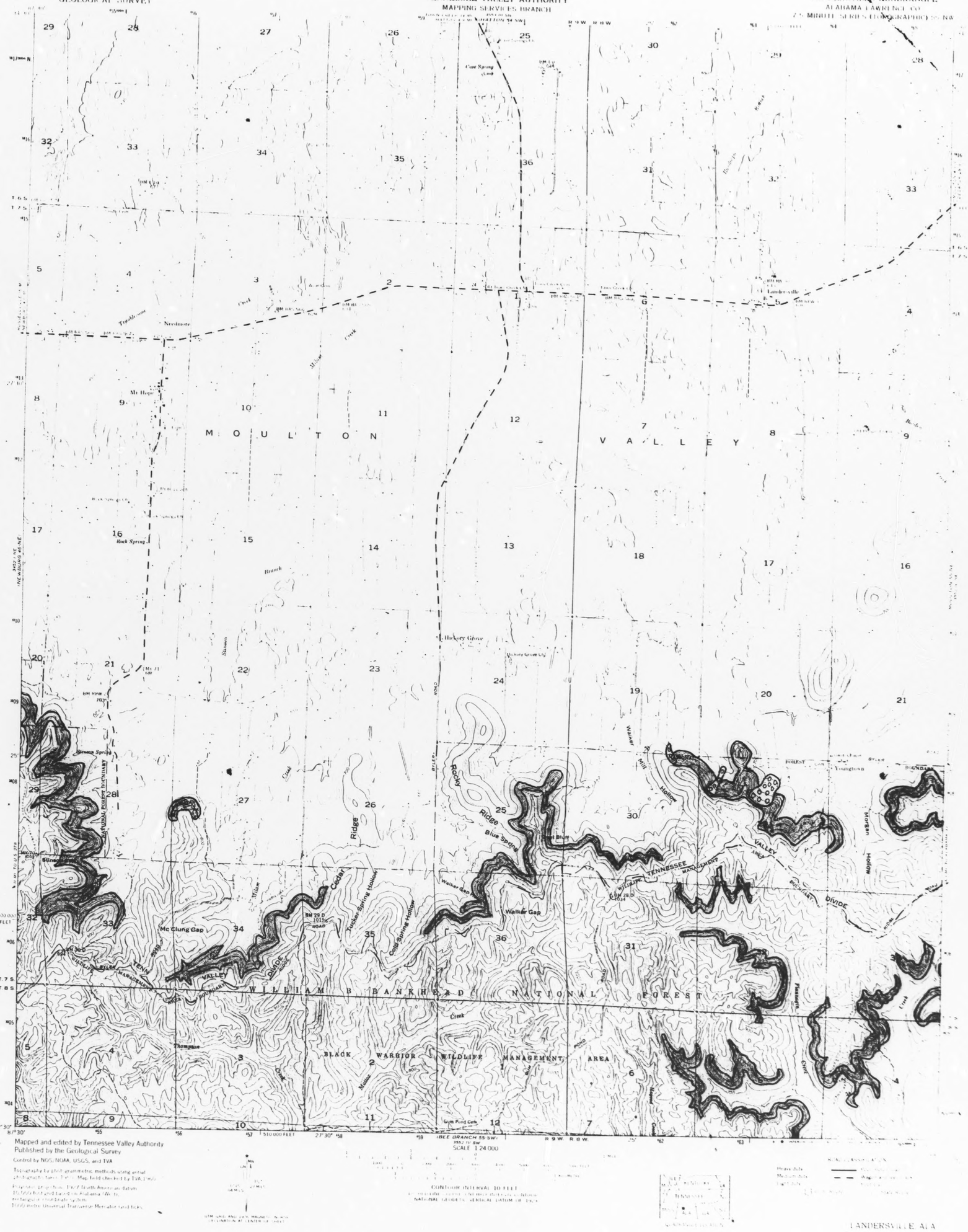
WILLIAM B. BANKHEAD
NATIONAL
FOREST
Gray Rock Ch.
Oak Grove Ch.
Kimbrough Chapel
New Hope Ch.
Union Sch.
Troublesome
Creek
Little
Branch
Mud
Creek
Little
Creek
Gin
Branch
Creek
Robertson
Branch
Creek
Creek
Creek

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

LANDERSVILLE QUADRANGLE
ALABAMA
LAWRENCE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)


MOULTON VALLEY
WILLIAM B BANKHEAD NATIONAL FOREST
BLACK WARRIOR WILDLIFE MANAGEMENT AREA
TENNESSEE VALLEY DIVIDE
Rocky Ridge
Blue Spring
Walker Gap
Mc Clung Gap
Cedar Ridge
Hickory Grove
Landersville
Mt Hope
Needmore
Rock Spring
Thompson
Stinson Spring
Walker Mtn
Youngtown
Cold Spring Hollow
Tucker Spring Hollow
Cedar Ridge
Gum Pond Cem
Tree Branch
Cove Spring
Hollow
Creek
Branch
Ridge
Valley
Mountain
Road
Trail
Church
Cem
Plantation
Boundary
Forest
Wildlife
Management
Area
Tennessee
Valley
Divide
Walker Gap
Mc Clung Gap
Blue Spring
Rocky Ridge
Cedar Ridge
Tucker Spring Hollow
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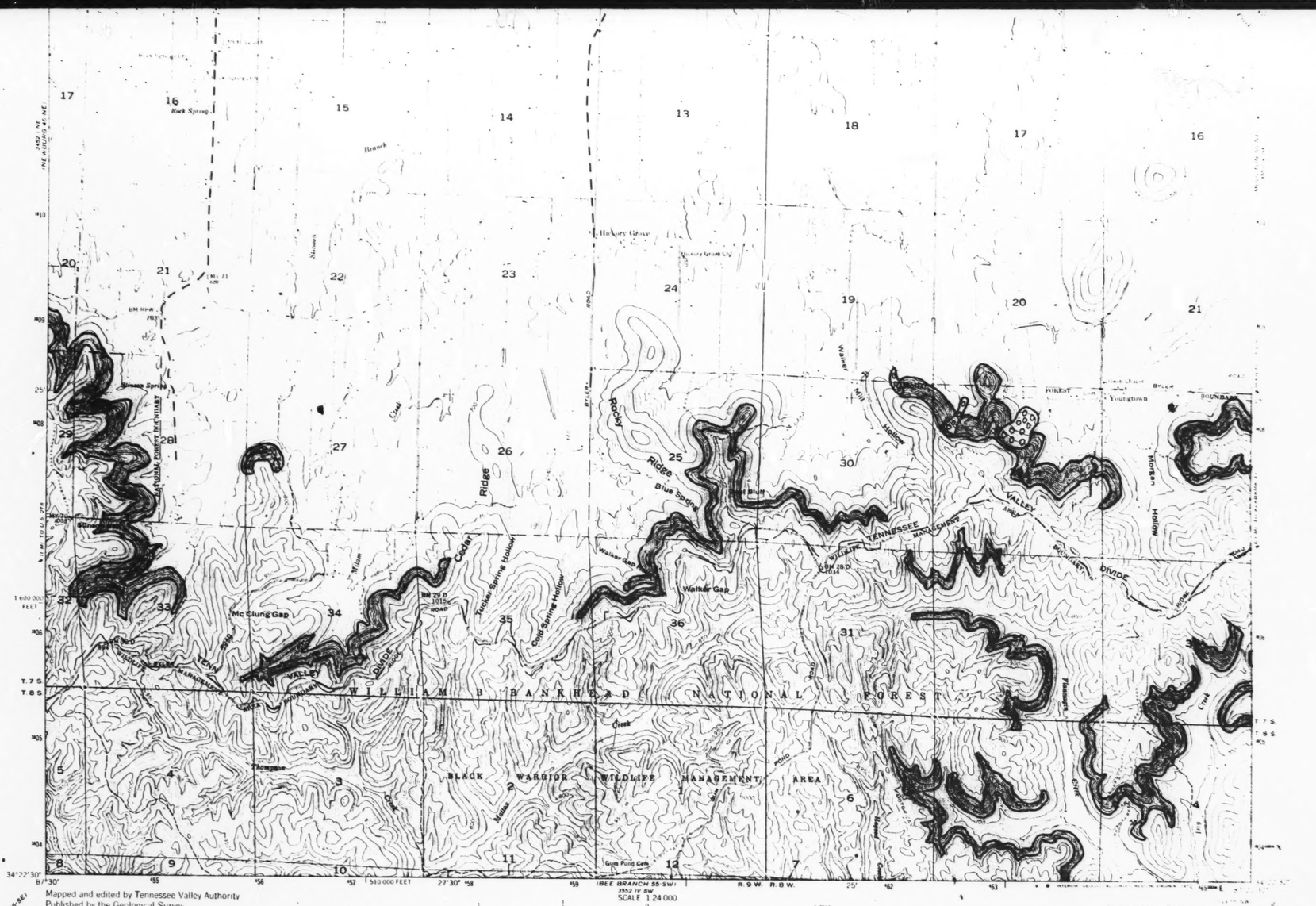
Landersville
Hickory Grove
Mt Hope
Needmore
Rock Spring
Thompson
Stinson Spring
Walker Mtn



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS/NOAA, USGS, and TVA

Topography by photogrammetric methods using aerial photographs taken 1971. Map field checked by TVA (1972)

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama (West) coordinate system
1000-meter Universal Transverse Mercator tick ticks

UTM GRID AND 1978 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

Landslides and related features interpreted from aerial photographs:

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1:40,000 (black and white) 1978

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Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

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LANDSLIDES AND RELATED FEATURES

OF THE LANDERSVILLE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (D-5)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

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- sd multiple furrows and multiple benches
- ss hilltop removed
- srg reclaimed by grading
- sru reclaimed by secondary use
- sh/r regraded in part, high wall remains

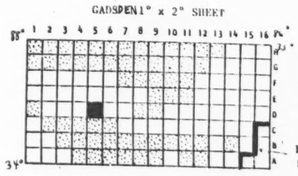
Coal refuse banks
- r identified on aerial photographs; not classified in field check
- rb not burnt nor on fire
- rbb burnt
- rbd burning
- rbs sludge

Quarries
- q quarry site
- qub spoil bank, quarry waste

Gravel pits
- g site of gravel pit

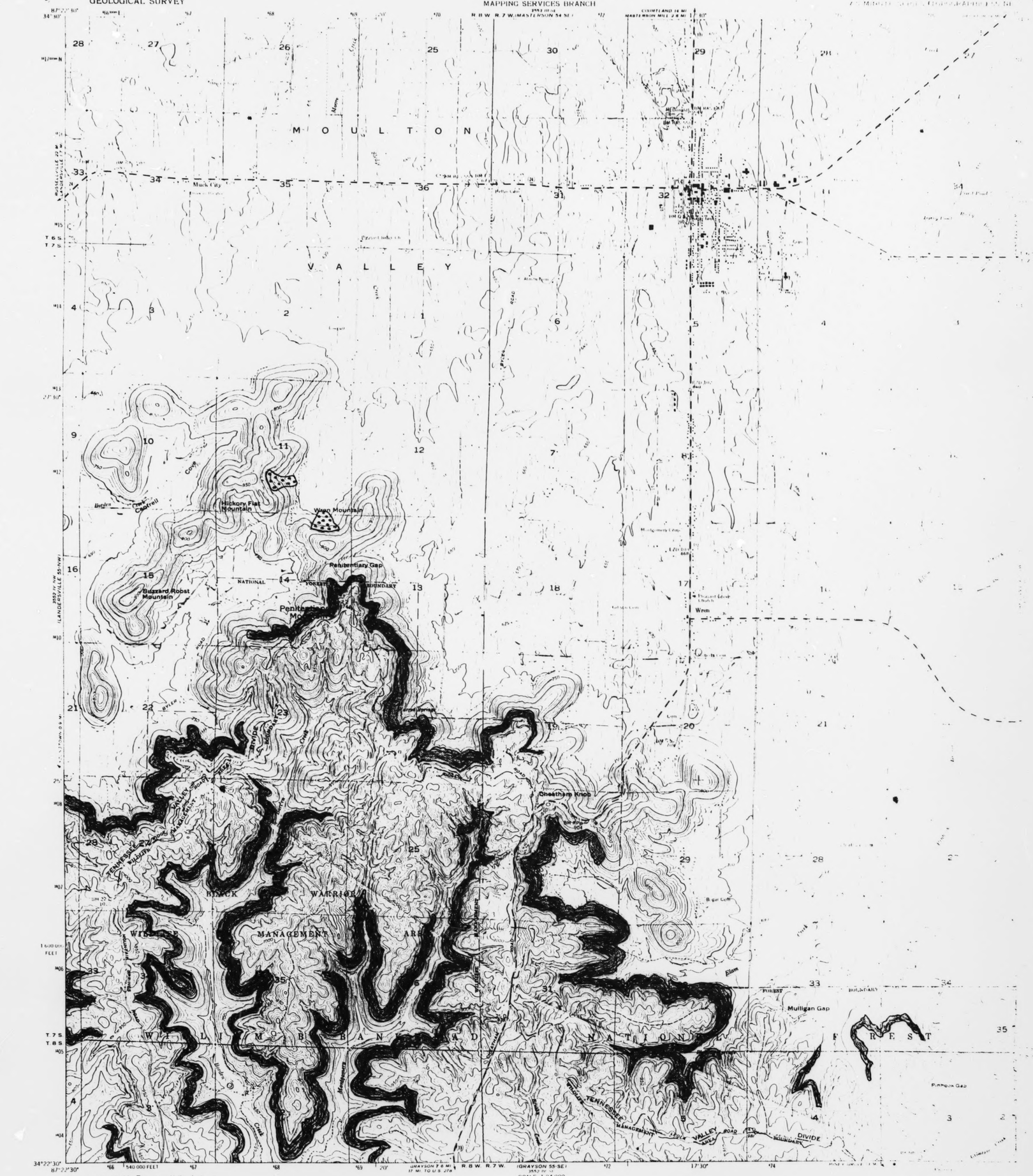
Slides in man-made features
- af earth flow in fill
- a/s earth flow in strip castings
- a/r earth flow in coal refuse

GADSDEN 1° x 2° SHEET



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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LANDSLIDES AND RELATED FEATURES

OF THE MOULTON, ALA. QUADRANGLE

by

John S. Pomeroy

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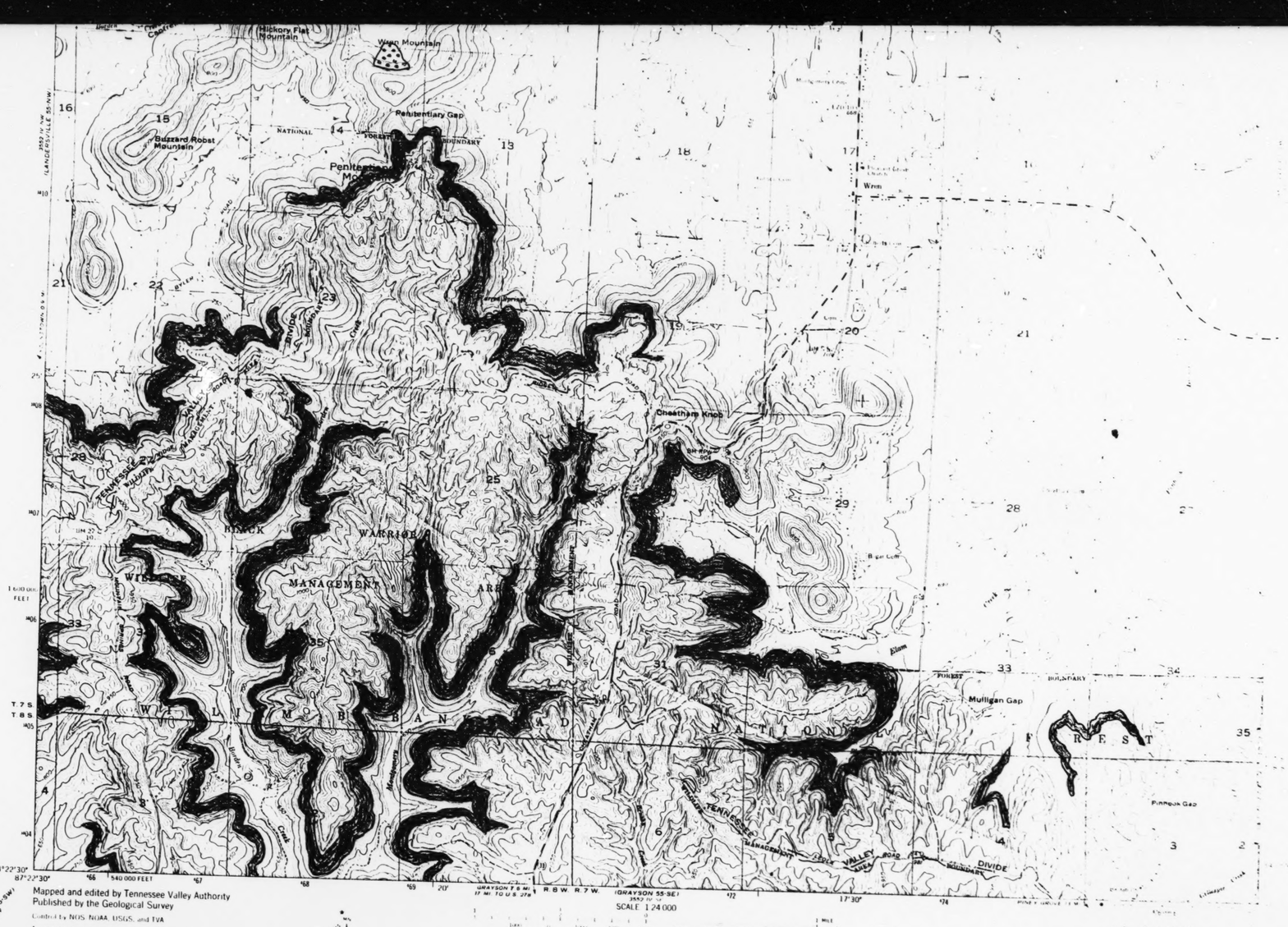

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

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LANDSLIDES AND RELATED FEATURES

OF THE MOULTON, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (D-6)

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- sf furrowed with high wall
- sd multiple furrows and multiple benches
- ss hilltop removed
- srg reclaimed by grading
- sru reclaimed by secondary use
- sh/r regraded in part, high wall remains

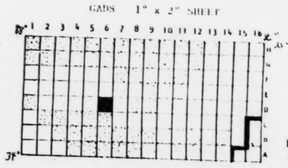
Coal refuse banks
- r identified on aerial photographs, not classified in field check
- rb not burnt nor on fire
- rbb burnt
- rbd burning
- rbs sludge

Quarries
- q quarry site
- qub spoil bank, quarry waste

Gravel pits
- g site of gravel pit

Slides in man-made features
- af earth flow in fill
- a/s earth flow in strip castings
- a/r earth flow in coal refuse

GADS 1° x 2° SHEET



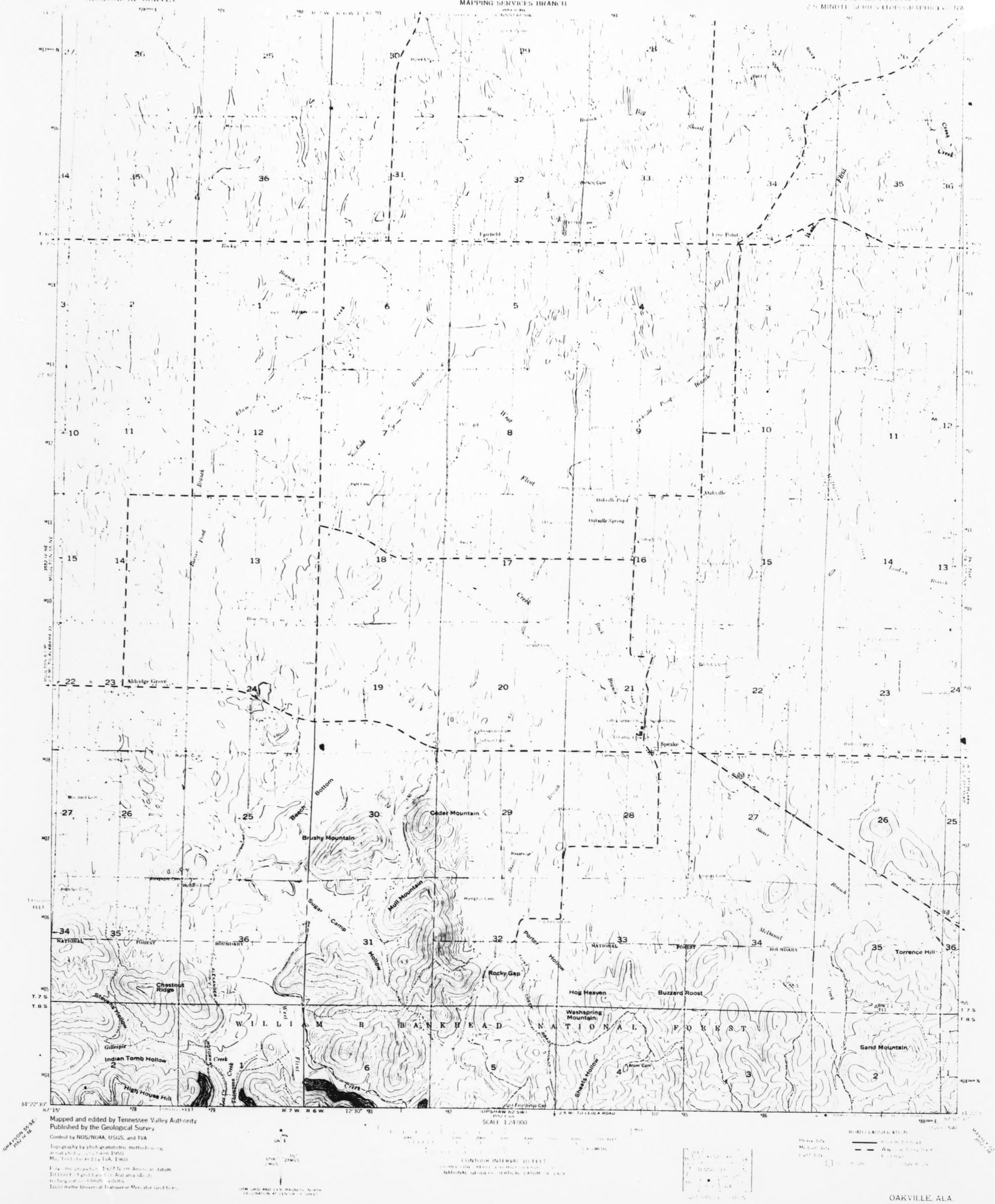
Quadrangle does not contain landslides or related features.

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

OAKVILLE QUADRANGLE
ALABAMA-LAWRENCE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS/NOAA, USGS, and TVA

Topography by photogrammetric methods from aerial photographs by TVA, 1980

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama (West) coordinate system
1000-meter Universal Transverse Mercator grid ticks

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

OAKVILLE, ALA.
1980

Landslides and related features interpreted from aerial photographs:

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1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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LANDSLIDES AND RELATED FEATURES

OF THE OAKVILLE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

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Published by the Geological Survey

Control by NOS/NOAA, USGS, and TVA

Topography by photogrammetric methods using
Aerial photographs taken 1960
Map field checked by TVA, 1960

Polyconic projection. 1927 North American datum
10 000 foot grid based on Alabama (West)
rectangular coordinate system
1000 metre Universal Transverse Mercator grid ticks

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LANDSLIDES AND RELATED FEATURES

OF THE OAKVILLE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (D-7)

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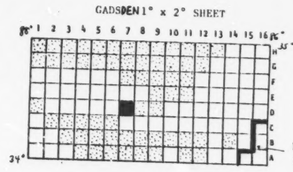
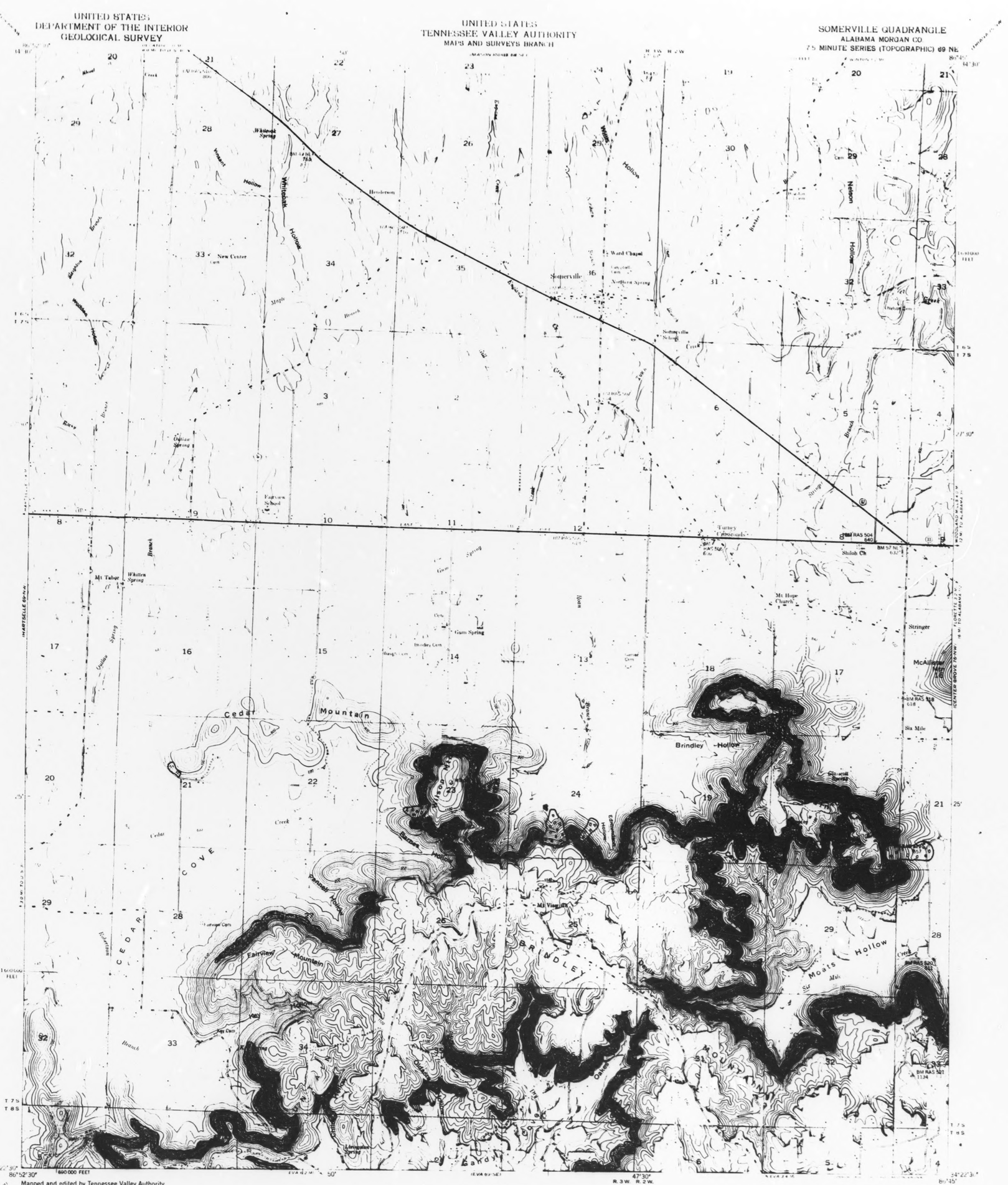


Quadrangle does not contain landslides or related features



Landslides and related features interpreted from aerial photographs:

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Photointerpretation and field check 1980-1981
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LANDSLIDES AND RELATED FEATURES

OF THE SOMERVILLE, ALA. QUADRANGLE

by

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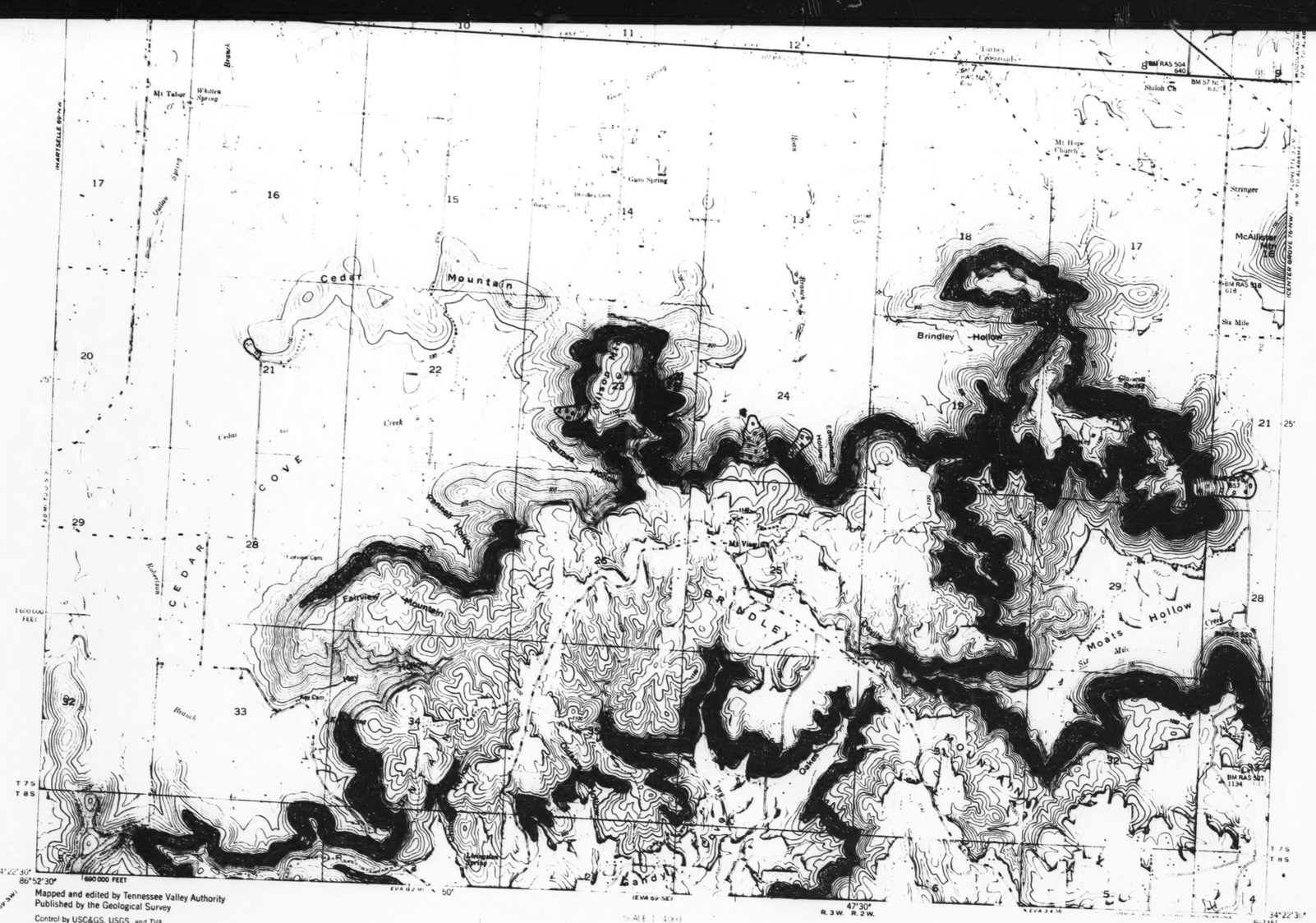

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by multiplex and planetable methods from aerial photographs taken 1946
Field examination by TVA, 1949

Polyconic projection, 1927 North American datum
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LANDSLIDES AND RELATED FEATURES

OF THE SOMERVILLE, ALA. QUADRANGLE

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1982

U.S. Geological Survey

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MAN-MADE FEATURES
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- sf furrowed with high wall
- sd multiple furrows and multiple benches
- ss hilltop removed
- srg reclaimed by grading
- sru reclaimed by secondary use
- sh/r regraded in part, high wall remains

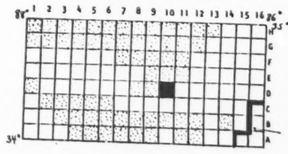
Coal refuse banks
- r identified on aerial photographs; not classified in field check
- rb not burnt nor on fire
- rbb burnt
- rbd burning
- rbs sludge

Quarries
- q quarry site
- qub spoil bank, quarry waste

Gravel pits
- g site of gravel pit

Slides in man-made features
- af earth flow in fill
- a/s earth flow in strip castings
- a/r earth flow in coal refuse

GADSPEN 1° x 2° SHEET



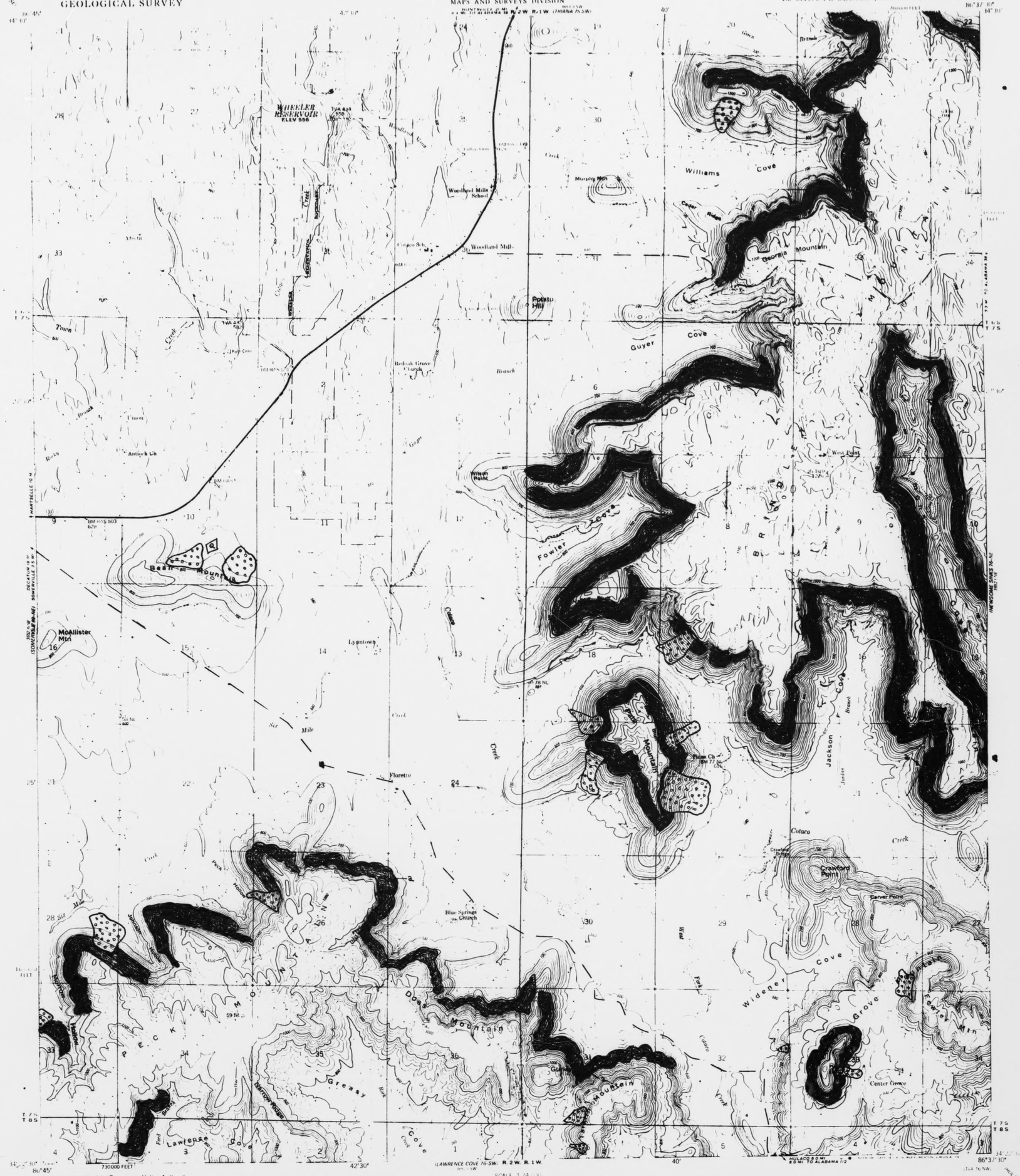
Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS DIVISION

CENTER GROVE QUADRANGLE
ALABAMA MORGAN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC) 76 NW



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by multiplex method from aerial photographs taken 1940. Field examination by TVA, 1947

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama West rectangular coordinate system

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET

ROAD CLASSIFICATION
HEAVY-WEIGHT, MEDIUM-WEIGHT, LIGHT-WEIGHT, UNIMPROVED DIRT
OTHER SURFACE IMPROVEMENTS
(41) U.S. ROUTE (31) STATE ROUTE

CENTER GROVE, ALA.
N4422.5 W8637.5/7.5
1947
AMS 5652 I NW—SERIES V844

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980–1981

LANDSLIDES AND RELATED FEATURES

OF THE CENTER GROVE, ALA. QUADRANGLE

by

NOTE

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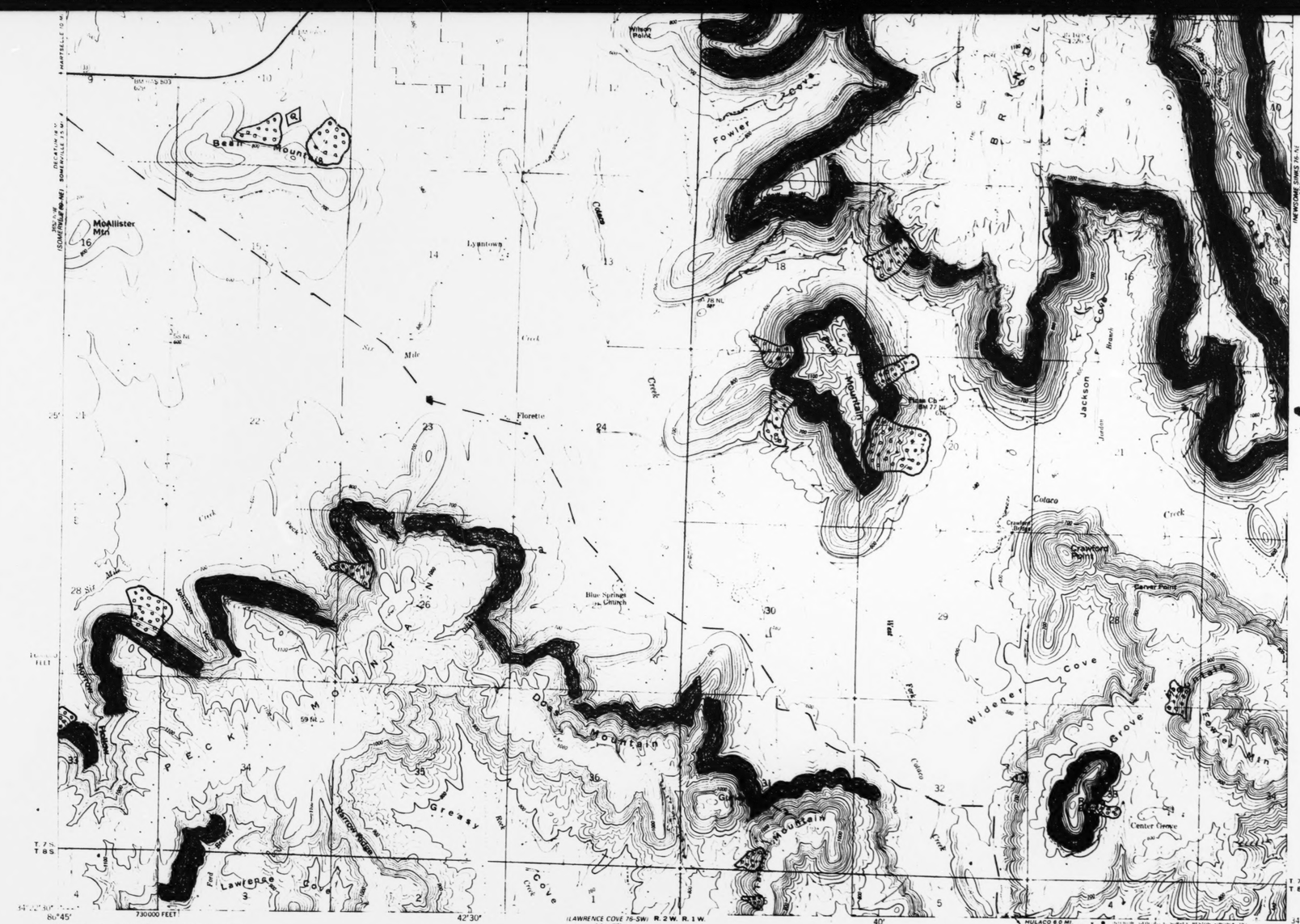
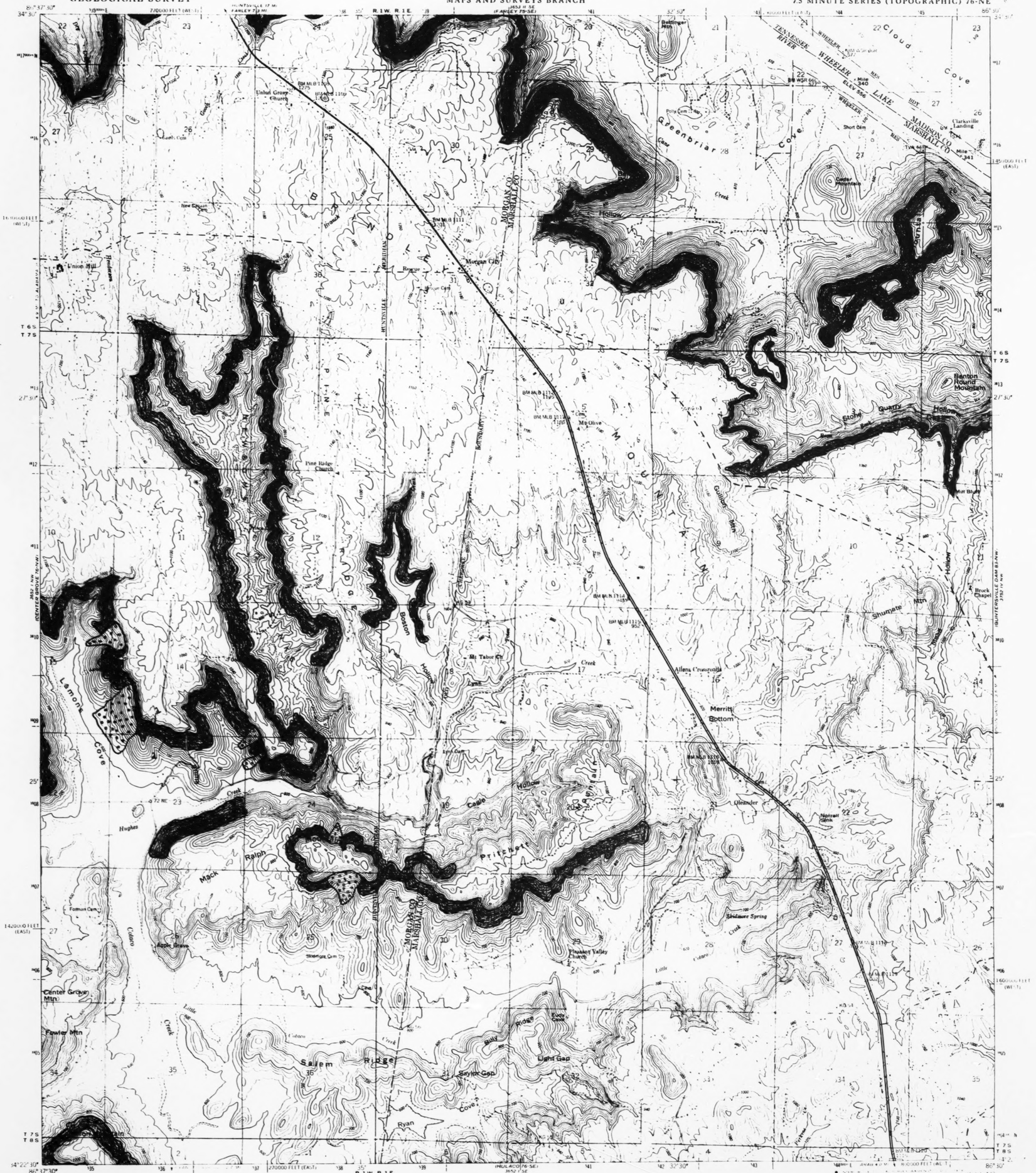

Wilson Point
Fowler Cove
Bear Mountain
McAllister Mtn
Lyntown
Florette
Blue Springs Church
Blue Cb
Mountain
Jackson Cove
Cotaco Creek
Crawford Point
Carver Point
Widener Cove
Center Grove
Dees Mountain
Greasy Cove
Lawrence Cove
Peck Mountain
Brindle
Mile Creek
Jordan Branch
Fork Creek
Ridge
Gap
Knob
Hill
Church
Cemetery
Bridge
Ford
Trail
Spring
Boundary
Fence
Line
Road
Creek
Cove
Mountain
Point
Grove

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

NEWSOME SINKS QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 7o-NE


R.1W. R.1E.
T 6S
T 7S
T 7S
T 8S
MORGAN CO
MARSHALL CO
MADISON CO
MARSHALL CO
TENNESSEE RIVER
WHEELER LAKE
Cloud Cove
Greenbriar Cove
Lamonts Cove
Union Hill
Morgan Cib
Mt Olive
Pine Ridge Church
Boston
Mt Tabor Ch
Allens Crossroads
Merritt Bottom
Clarksville Landing
Short Dam
Center Mountain
Benton Roland Mountain
Brock Chapel
Shumate Hill
Hughes
Ralph
Mack
Priest Ridge
Salem Ridge
Light Gap
Saylor Gap
Ryan
Fowler Mtn
Center Grove Mtn
Oleander
Norreal Gin
Shiloh Spring
Flaxley Valley Church
Apple Grove
Pine Ridge Church
Union Grove Church
New Canaan
Rogue
Bellinger Mtn
Gurley
Guinn Mtn
Mt Blue
Lamonts Cove
Cuevo
Little Creek
Greenbriar Creek
Cloud Cove
Hollow
Ridge
Gap
Cove
Creek
Cem
Ch
Church
Mtn
Hill
Spring
Landing
Dam
Lake
Mile 340
Mile 341
Elev 556
Twr 445
BM MLB 1111
BM MLB 1112
BM MLB 1113
BM MLB 1114
BM MLB 1115
BM MLB 1116
BM MLB 1117
BM MLB 1118
BM MLB 1119
BM MLB 1120
BM MLB 1121
BM MLB 1122
BM MLB 1123
BM MLB 1124
BM MLB 1125
BM MLB 1126
BM MLB 1127
BM MLB 1128
BM MLB 1129
BM MLB 1130
BM MLB 1131
BM MLB 1132
BM MSR 661
BM MSR 662
BM MSR 663
BM MSR 664
BM MSR 665
BM MSR 666
BM MSR 667
BM MSR 668
BM MSR 669
BM MSR 670
BM MSR 671
BM MSR 672
BM MSR 673
BM MSR

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric and planetable methods using aerial photographs taken 1948.
Map field checked by TVA, 1947

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama (East) and Alabama (West) rectangular coordinate systems
1000 meter Universal Transverse Mercator grid ticks, Zone 16, shown in blue

ROAD CLASSIFICATION

Heavy duty	Poor motor road
Medium duty	Wagon and jeep trail
Light duty	Foot trail
Route	State Route

NEWSOME SINKS, ALA.

N3422.5—W8630 7.5

1947

AMS 5662 I NE-SERIES V844

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

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Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE NEWSOME SINKS, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (D-12)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

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Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

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- sru reclaimed by secondary use
- sh/r regraded in part, high wall remains

Coal refuse banks
- r identified on aerial photographs; not classified in field check
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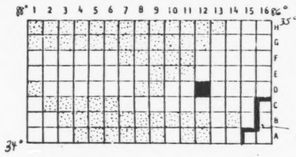
- rbb burnt
- rbd burning
- rbs sludge

Quarries
- q quarry site
- qub spoil bank, quarry waste

Gravel pits
- g site of gravel pit

Slides in man-made features
- af earth flow in fill
- a/s earth flow in strip castings
- a/r earth flow in coal refuse

GADSDEN 1° x 2° SHEET



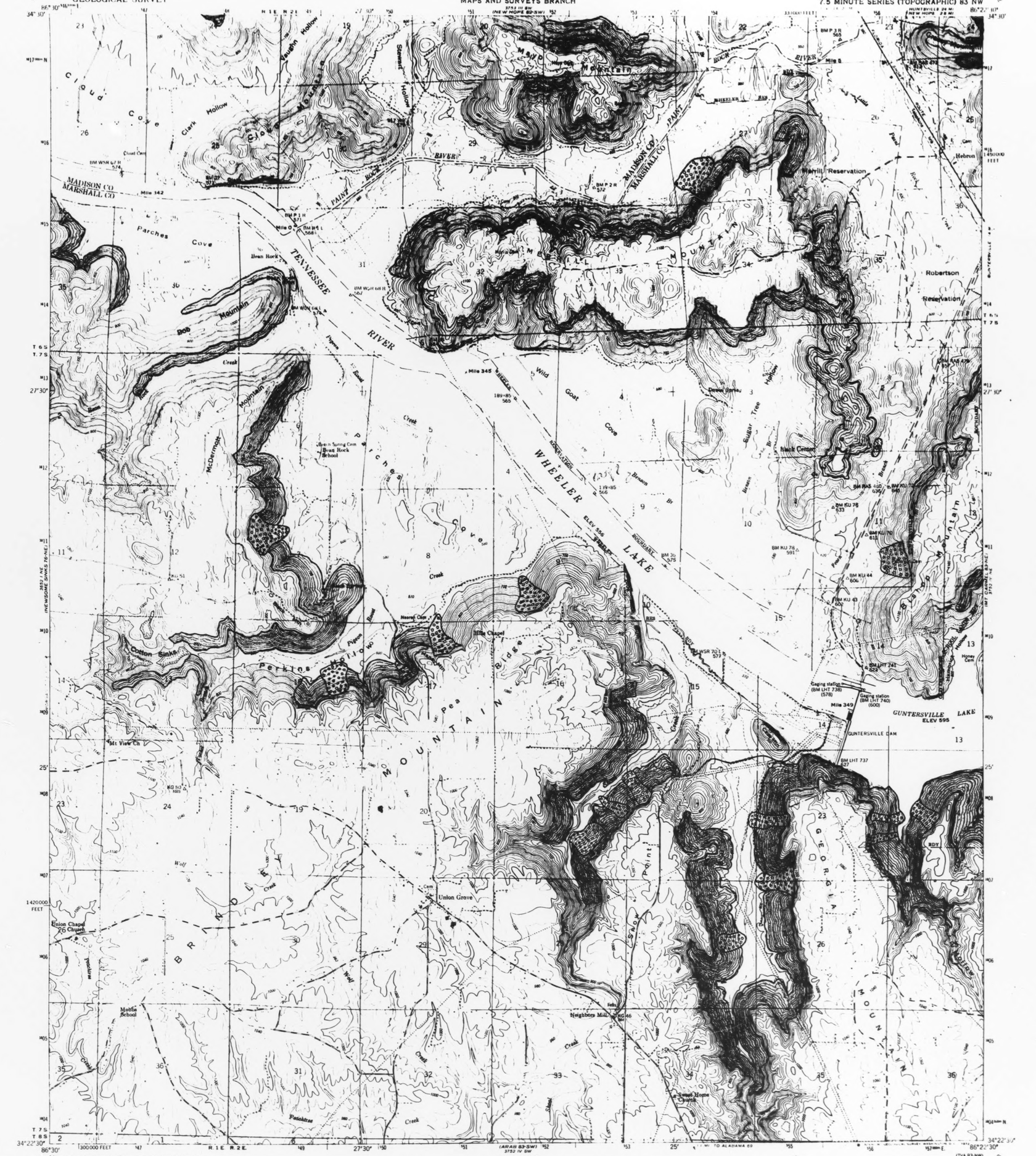
Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

GUNTERSVILLE DAM QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 83 NW



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods using aerial photographs taken 1948

Map field checked by TVA, 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) rectangular coordinate system
1000 meter Universal Transverse Mercator grid ticks, Zone 16, shown in blue

SCALE 1:24000

CONTOUR INTERVAL 20 FEET
DASHED LINES REPRESENT HALF INTERVAL CONTOURS
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

UTM GRID AND 1970 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

ROAD CLASSIFICATION
Heavy duty — Poor motor road
Medium duty — Wagon and jeep track
Light duty — Foot trail
U.S. Route — State Route
In developed areas, only through roads are classified.

GUNTERSVILLE DAM, ALA.
N3422.5—W86/2.5/7.5
1948
PHOTOREVISED 1970
AMS 5752 IV NW-SERIES V844

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S. Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE GUNTERSVILLE DAM, ALA. QUADRANGLE

by

John S. Pomeroy

1982

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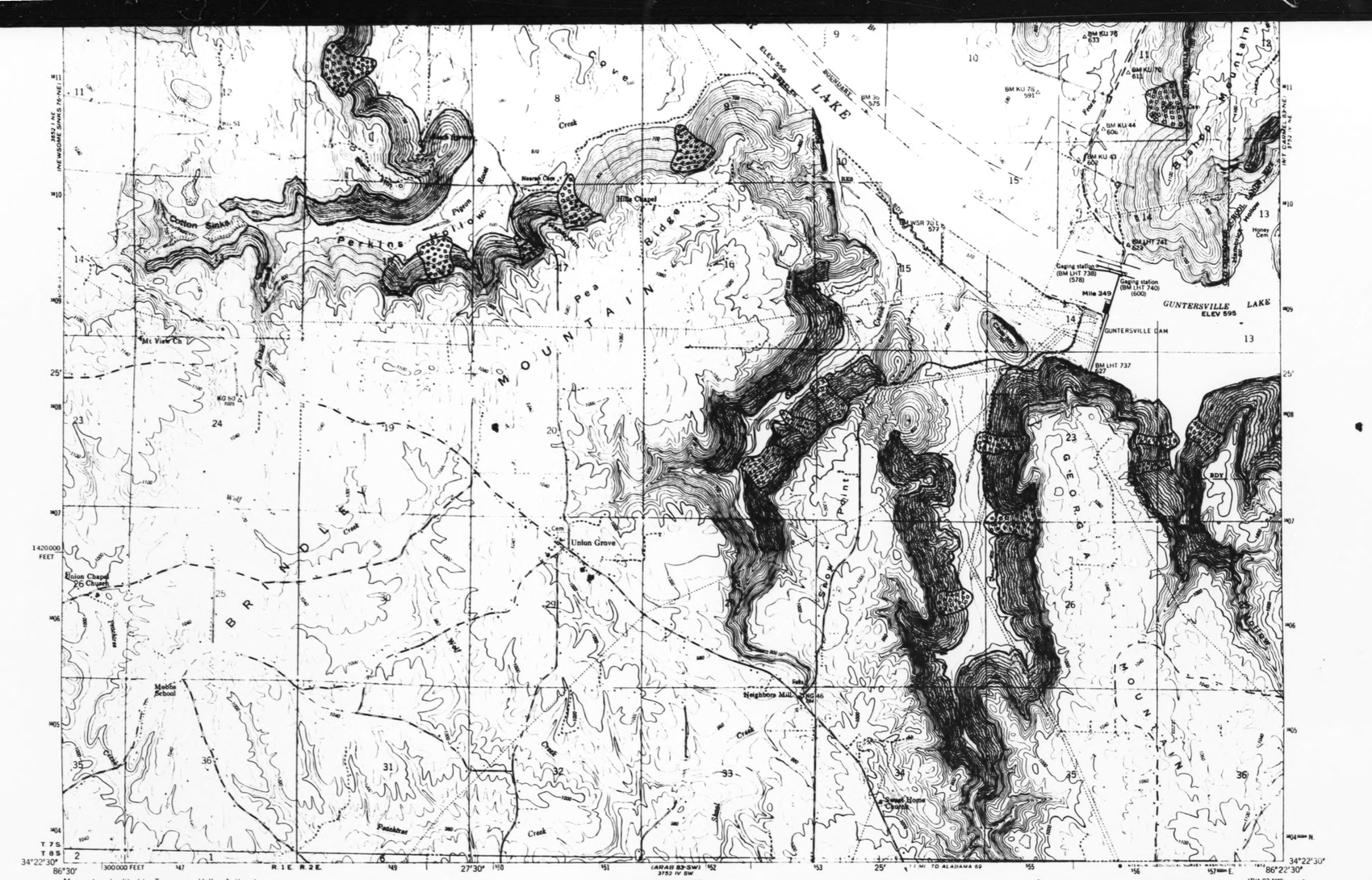

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods using aerial photographs taken 1946
Map field checked by TVA, 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks, Zone 16, shown in blue

GUNTERSVILLE DAM, ALA.

N3422.5—W8622.5/7.5

1948

PHOTOREVISED 1970

AMS 3752 IV NW-SERIES V844

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LANDSLIDES AND RELATED FEATURES

OF THE GUNTERSVILLE DAM, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (D-13)

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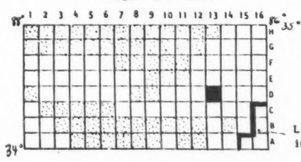
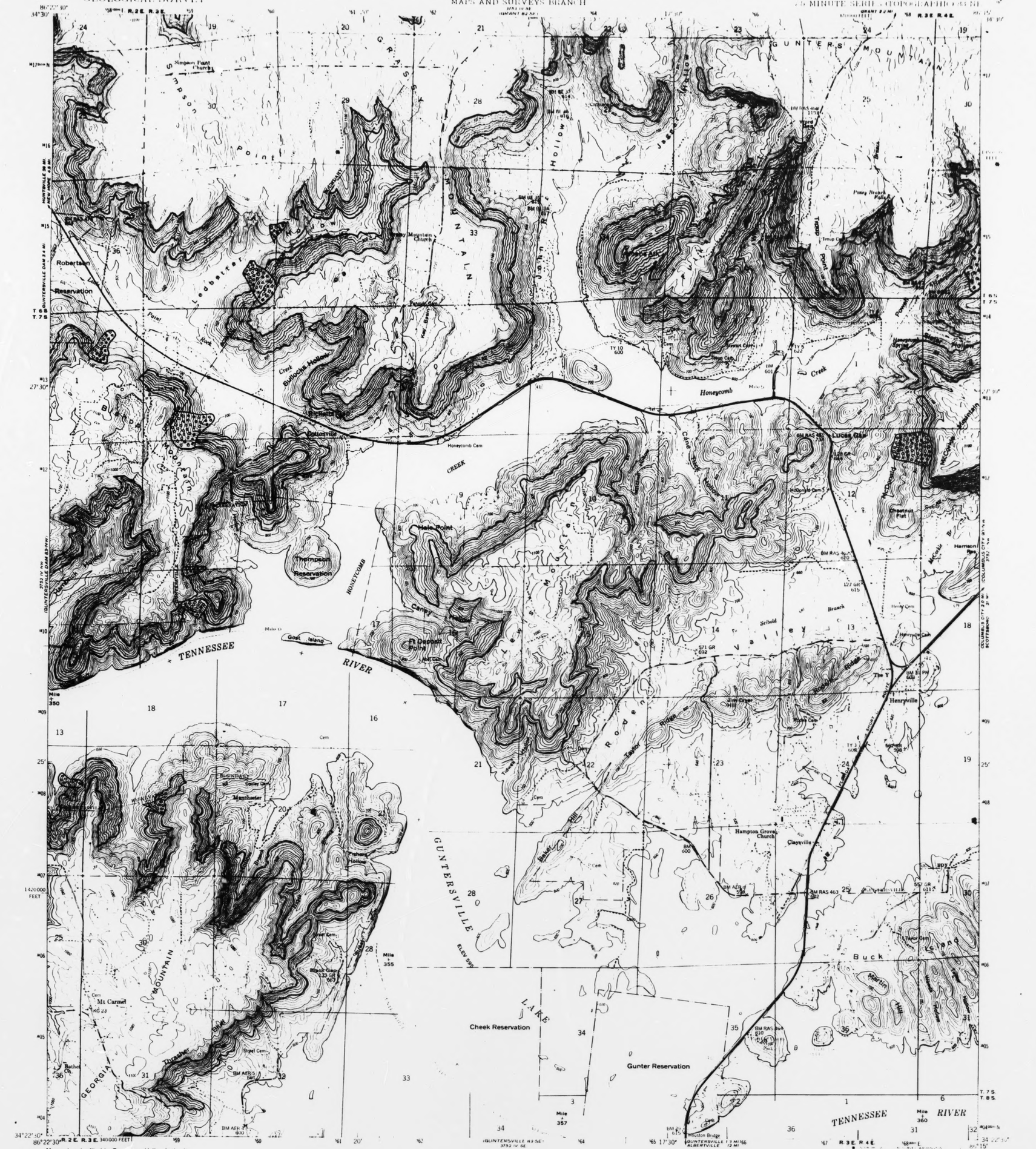


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

MT. CARMEL QUADRANGLE
ALABAMA MARSHALL CO
7.5 MINUTE SERIES (TOPOGRAPHIC)



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Control by USC&GS, USGS, and TVA

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Map field checked by TVA, 1948

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1000 meter Universal Transverse Mercator Grid ticks, Zone 16, shown in blue

MT. CARMEL, ALA.
1948

Landslides and related features interpreted from aerial photographs:

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1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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LANDSLIDES AND RELATED FEATURES

OF THE MT. CARMEL, ALA. QUADRANGLE

by

John S. Pomeroy

1982

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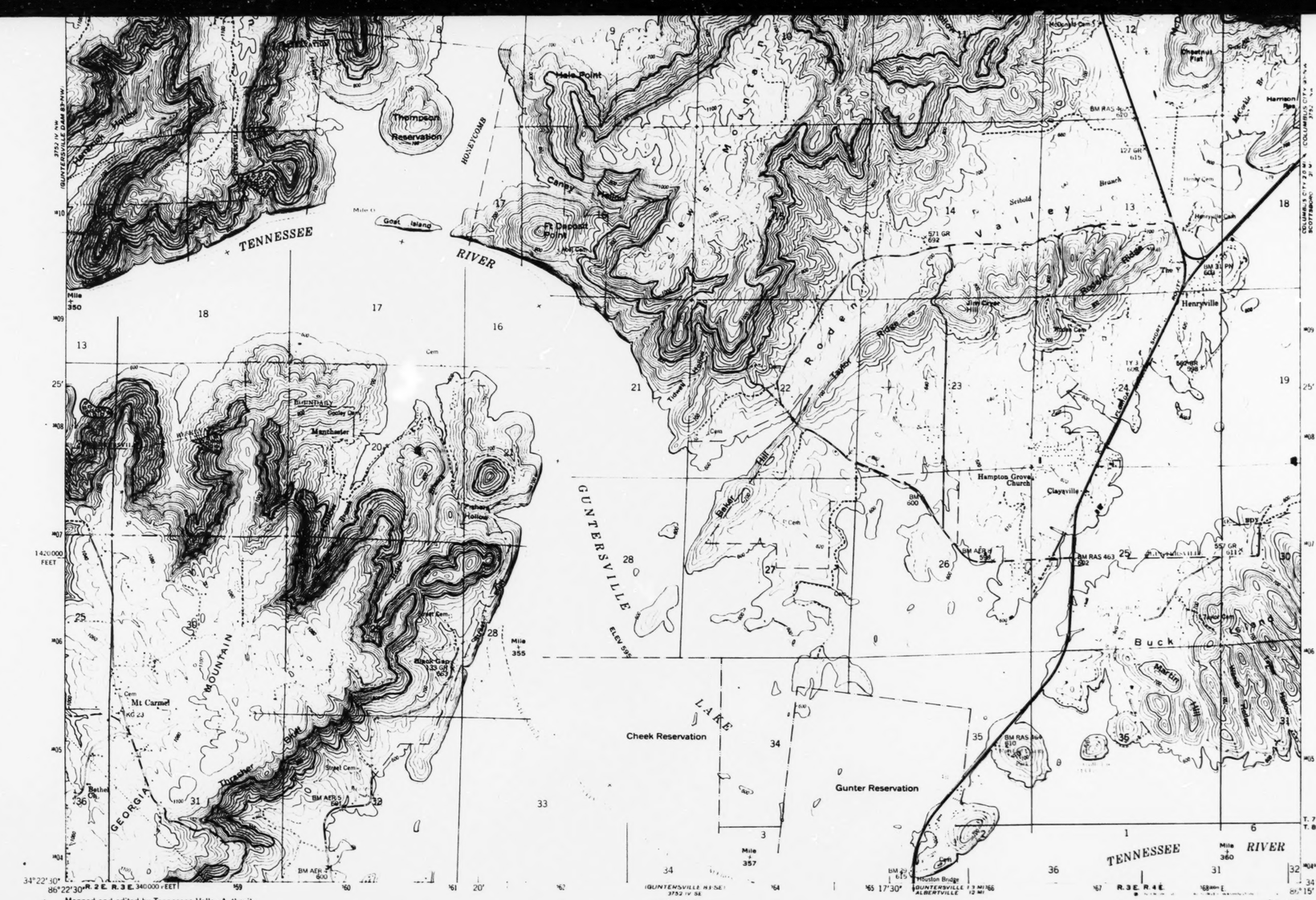

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DECLINATION AT CENTER OF SHEET

CONTOUR INTERVAL 20 FEET
DASHED LINES REPRESENT HALF INTERVAL CONTOURS
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

KENTUCKY
TENNESSEE
MISS
ALA
GA
S.C.
N.C.
VA

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Heavy duty	Poor motor road
Medium duty	Wagon and jeep trail
Light-duty	Foot trail
U. S. Route	State Route

MT. CARMEL, ALA.

N3422.5-W8615-7.5

1948

AMS 5972 IV NE-SERIES V841

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1:40,000 (black and white) 1978

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LANDSLIDES AND RELATED FEATURES

OF THE MT. CARMEL, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (D-N)

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MAN-MADE FEATURES
Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

sh	bench with high wall
sf	furrowed with high wall
sd	multiple furrows and multiple benches
ss	hilltop removed
srg	reclaimed by grading
sru	reclaimed by secondary use
sh/r	regraded in part, high wall remains

Coal refuse banks

r	identified on aerial photographs; not classified in field check
rb	not burnt nor on fire
rbb	burnt
rbd	burning
rbs	sludge

Quarries

q	quarry site
qub	spoil bank, quarry waste

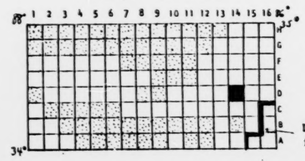
Gravel pits

g	site of gravel pit

Slides in man-made features

af	earth flow in fill
a/s	earth flow in strip castings
a/r	earth flow in coal refuse

GADSDEN 1° x 2° SHEET



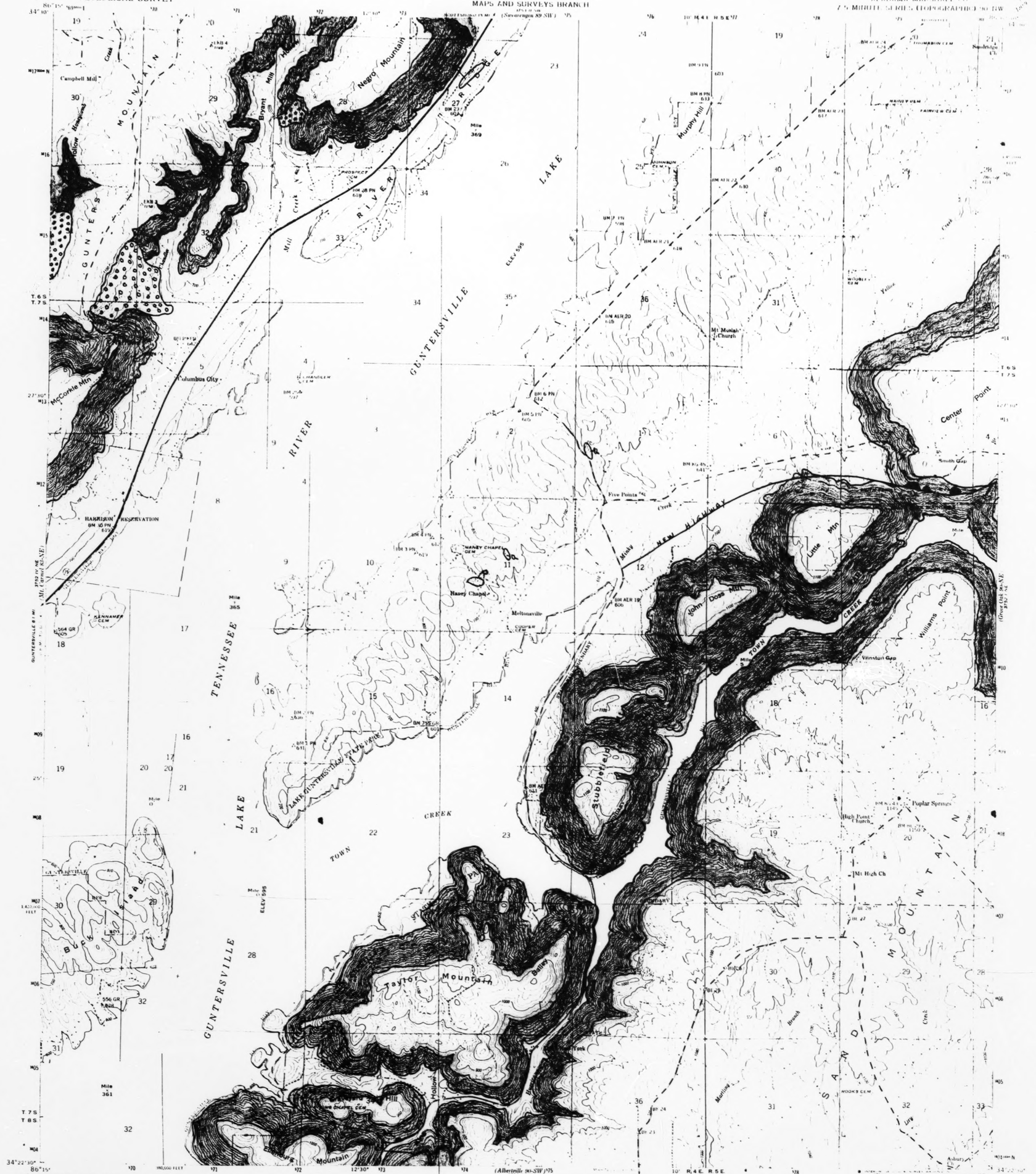
Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

COLUMBUS CITY QUADRANGLE
ALABAMA-MARSHALL CO.
7.5 MINUTE SERIES (TOPOGRAPHIC) 30 BW


Negro Mountain
Bryant Mtn
Hollow Heaven
GUNTERS MOUNTAIN
Campbell Mill
McCorkle Mtn
Columbus City
HARRISON RESERVATION
BM 10 PN 619
Bryant Creek
Mill Creek
RIVER
TENNESSEE
LAKE GUNTERSVILLE STATE PARK
GUNTERSVILLE
LAKE
Haney Chapel
Meltonsville
Five Points
Misty
NEW HIGHWAY
Murphy Hill
Mt Moriah Church
Center Point
Smith Gap
Little Mtn
John Doss Mtn
TOWN CREEK
Williams Point
Winston Gap
Stubblefield
Poplar Springs
High Point Church
Mt High Ch
SAND MOUNTAIN
Taylor Mountain
Buck Head
Baker
Hollow
Mountain
Asbury
Five Points Creek
Misty Creek
Martins Creek
Brush Creek
Yellow Creek
Mile 369
Mile 365
Mile 361
ELEV 595
556 GR 622
564 GR 605
BM 28 PN 619
BM 6 PN 612
BM 10 PN 619
BM AER 20 615
BM AER 19 606
BM AER 23 617
BM AER 22 680
BM AER 21 628
BM 5 TN 640
BM 3 PN 611
BM 2 TN 603
BM 8 PN 633
BM 4 TN 1140
BM 1 TN 1250
BM 24
BM 23
BM 45 641
BM 255 GR 603
BM AER 18 643
BM AER 17 617
BM 27 624
BM 2 TN 598
BM 1 TN 598
BM 3 TN 2630
BM 1 PN 611
BM 4 PN 1140
BM 1 TN 1250
BM 2 TN 603
BM 8 PN 633
BM 5 TN 640
BM 6 PN 612
BM 28 PN 619
BM 10 PN 619
BM AER 20 615
BM AER 19 606
BM AER 23 617
BM AER 22 680
BM AER 21 628
BM 45 641
BM 24
BM 23
BM 27 624
BM 255 GR 603

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods.
Map field checked by TVA, 1947

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks.

SCALE 1:24000

CONTOUR INTERVAL 20 FEET
DASHED LINES REPRESENT HALF INTERVAL CONTOURS
DATUM IS MEAN SEA LEVEL

This map complies with National Map Accuracy Standards

UTM GRID AND 1975 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Heavy-duty	———	Poor motor road
Medium-duty	— — —	Wagon and jeep trail
Light-duty		Foot trail
U. S. Route		State Route

COLUMBUS CITY, ALA.

1947

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S Geological Survey editorial standards

ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

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Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE COLUMBUS CITY, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (B-15)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

sh	bench with high wall
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srg	reclaimed by grading
sru	reclaimed by secondary use
sh/r	regraded in part, high wall remains

Coal refuse banks

r	identified on aerial photographs; not classified in field check
rb	not burnt nor on fire
rbb	burnt
rbd	burning
rbs	sludge

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q	quarry site
qub	spoil bank, quarry waste

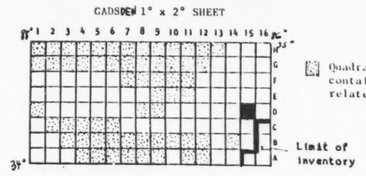
Gravel pits

g	site of gravel pit

Slides in man-made features

af	earth flow in fill
a/s	earth flow in strip castings
a/r	earth flow in coal refuse

GADSDEN 1° x 2° SHEET



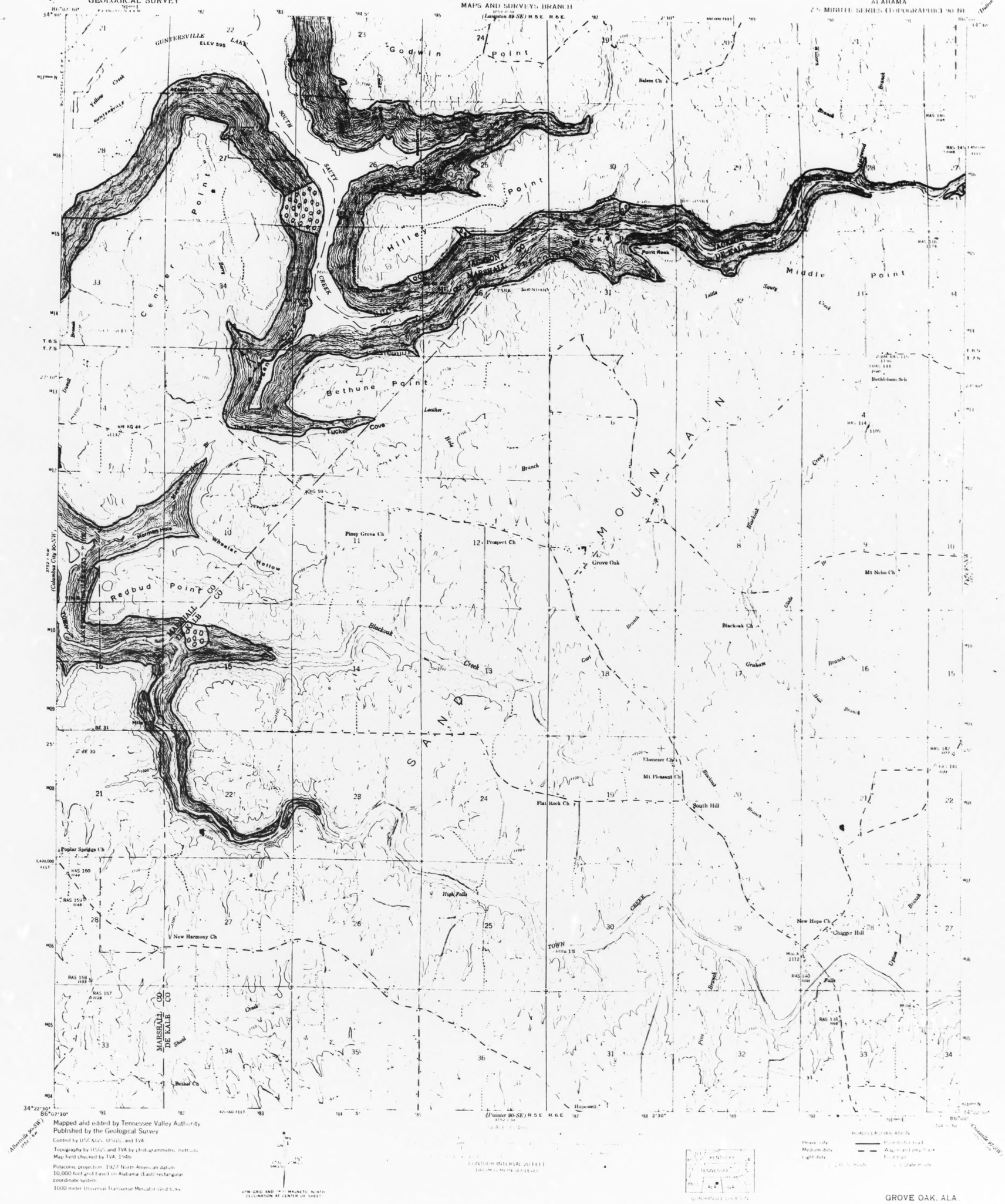
Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

GROVE OAK QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 90 NE



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods
Map field checked by TVA, 1946

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) rectangular coordinate system
1000 meter Universal Transverse Mercator grid ticks

UTM GRID AND 1978 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

ROAD CLASSIFICATION
Heavy duty — Primary highway
Medium duty — Secondary highway
Light duty — Local road

GROVE OAK, ALA.
1946

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE GROVE OAK, ALA. QUADRANGLE

by

John S. Pomeroy

NOTE

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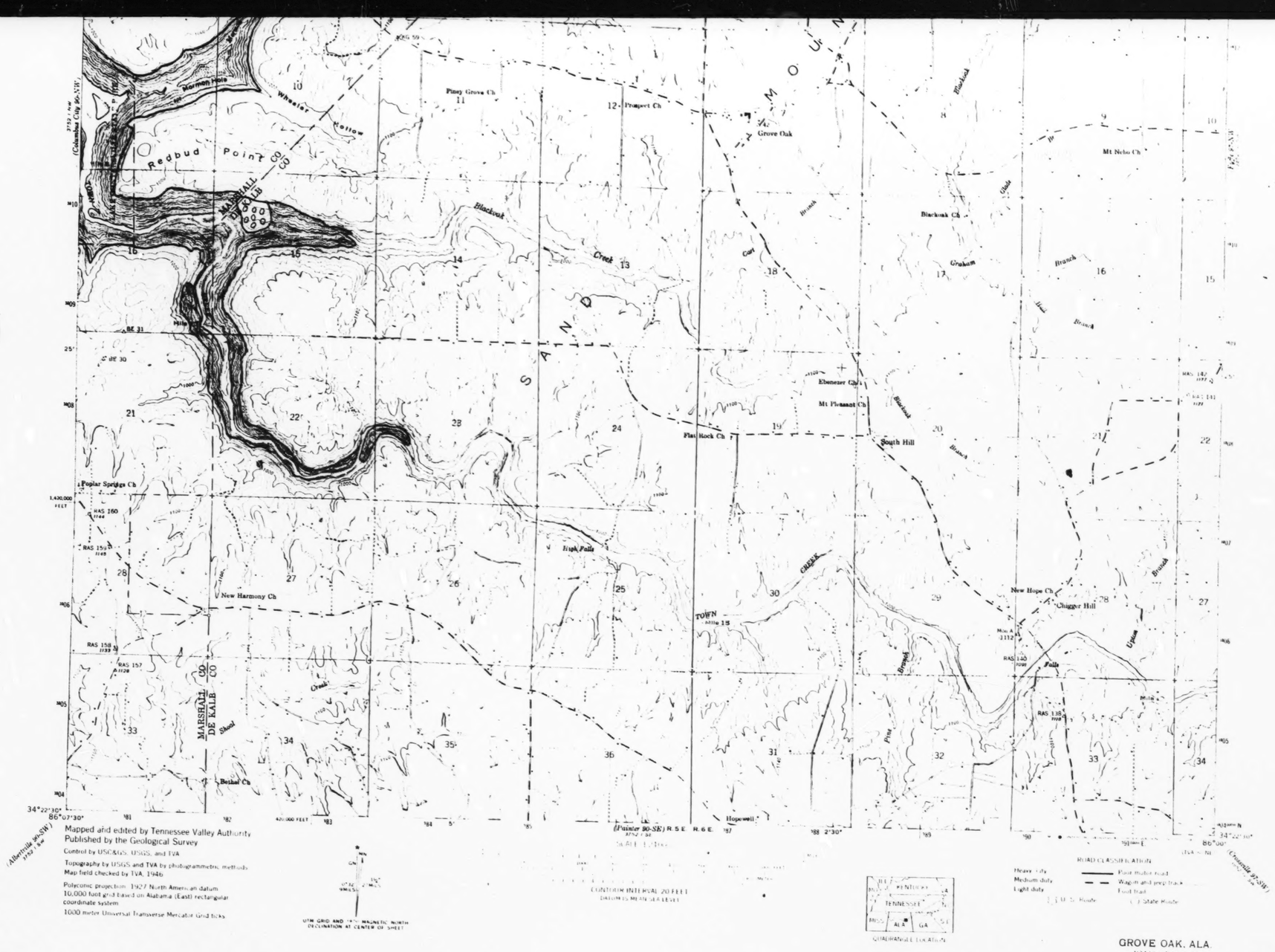

GROVE OAK, ALA.

N3422.5-W8600/7.5

1946

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE GROVE OAK, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (D-16)

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Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

sh	bench with high wall
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Coal refuse banks

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Quarries

q	quarry site
qub	spoil bank, quarry waste

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g	site of gravel pit

Slides in man-made features

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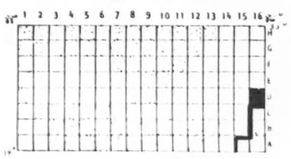
a/s	earth flow in strip castings
a/r	earth flow in coal refuse

GADSDEN 1° x 2° SHEET



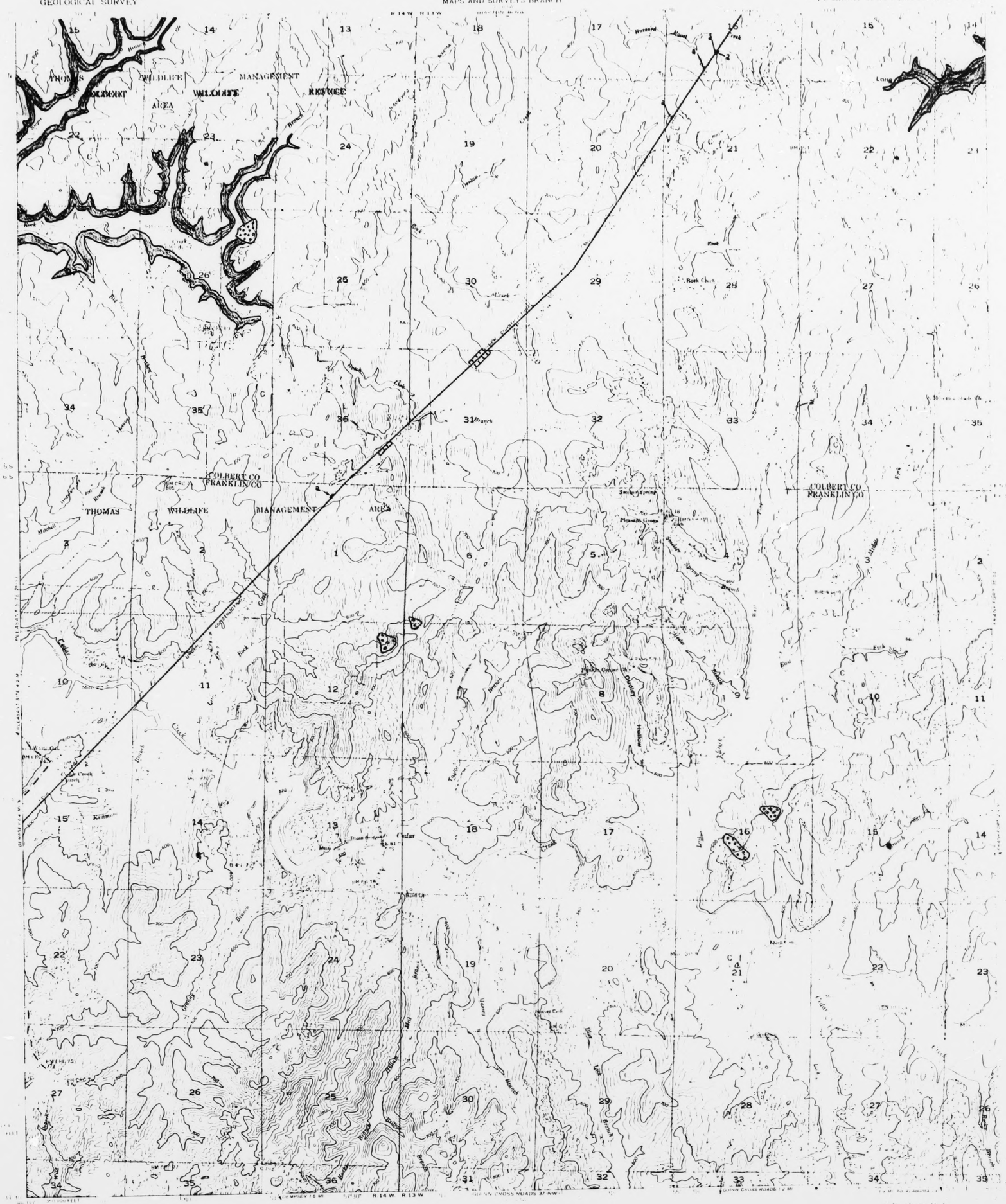
Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

PLEASANT GROVE QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped in Feb-Mar 1979 by Tennessee Valley Authority
Published in 19 by Geological Survey

PLEASANT GROVE, ALA.

Landslides and related features interpreted from aerial photographs:
1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial

LANDSLIDES AND RELATED FEATURES

OF THE PLEASANT GROVE, ALA. QUADRANGLE

by

John S. Pomeroy

NOTE

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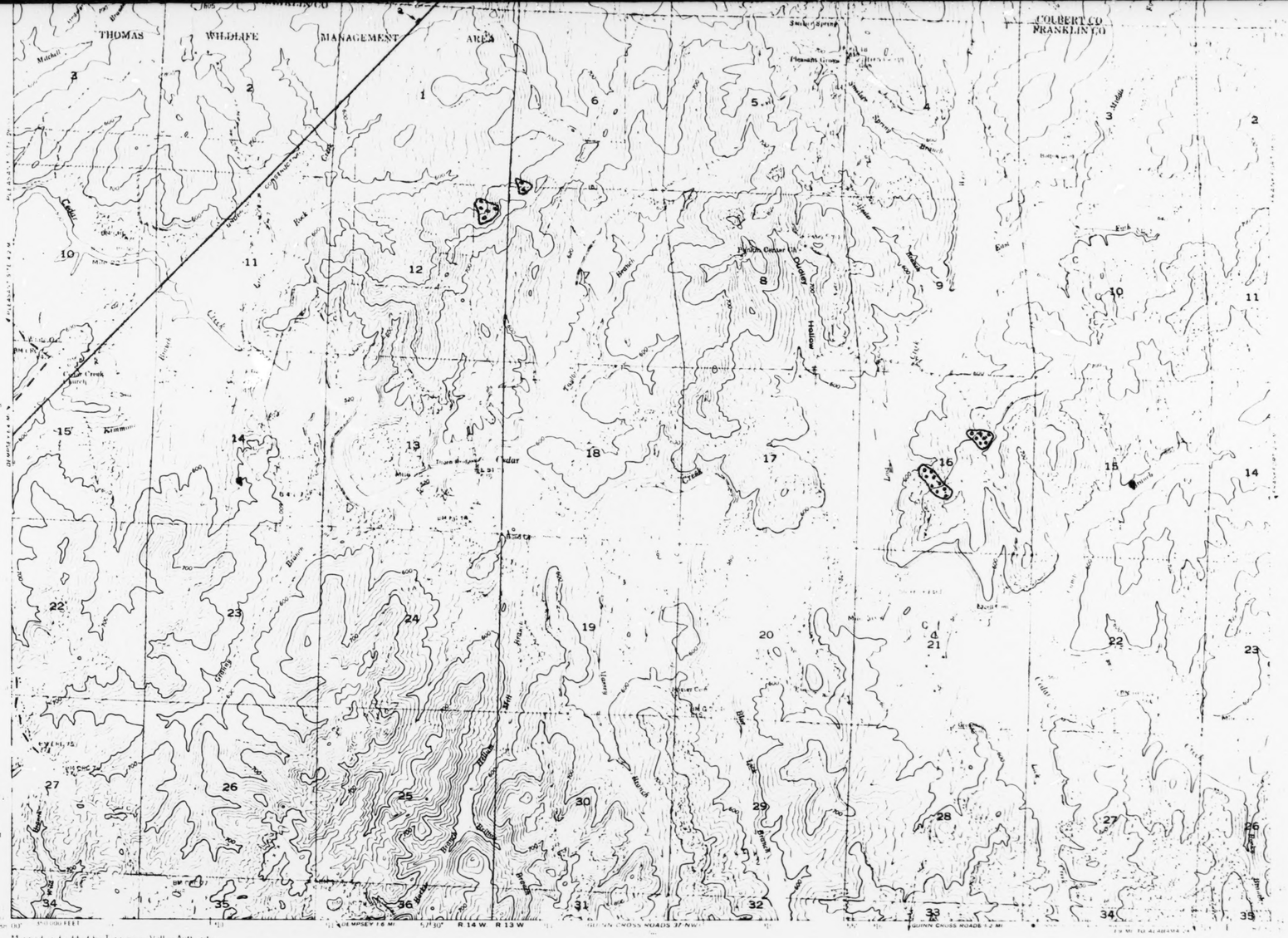

Mapped, edited by Tennessee Valley Authority
Published by the Geological Survey

PLEASANT GROVE, ALA.

1957

Landslides and related features interpreted from aerial photographs:

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1:40,000 (black and white) 1978

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LANDSLIDES AND RELATED FEATURES

OF THE PLEASANT GROVE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (E-1)

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- r — identified on aerial photographs; not classified in field check
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- qub — spoil bank, quarry waste

Gravel pits
- g — site of gravel pit

Slides in man-made features
- af — earth flow in fill
- a/s — earth flow in strip castings
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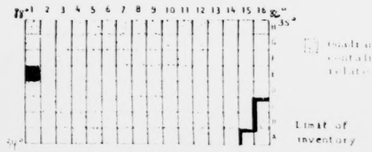
GASPEN 1° x 2° SHEET



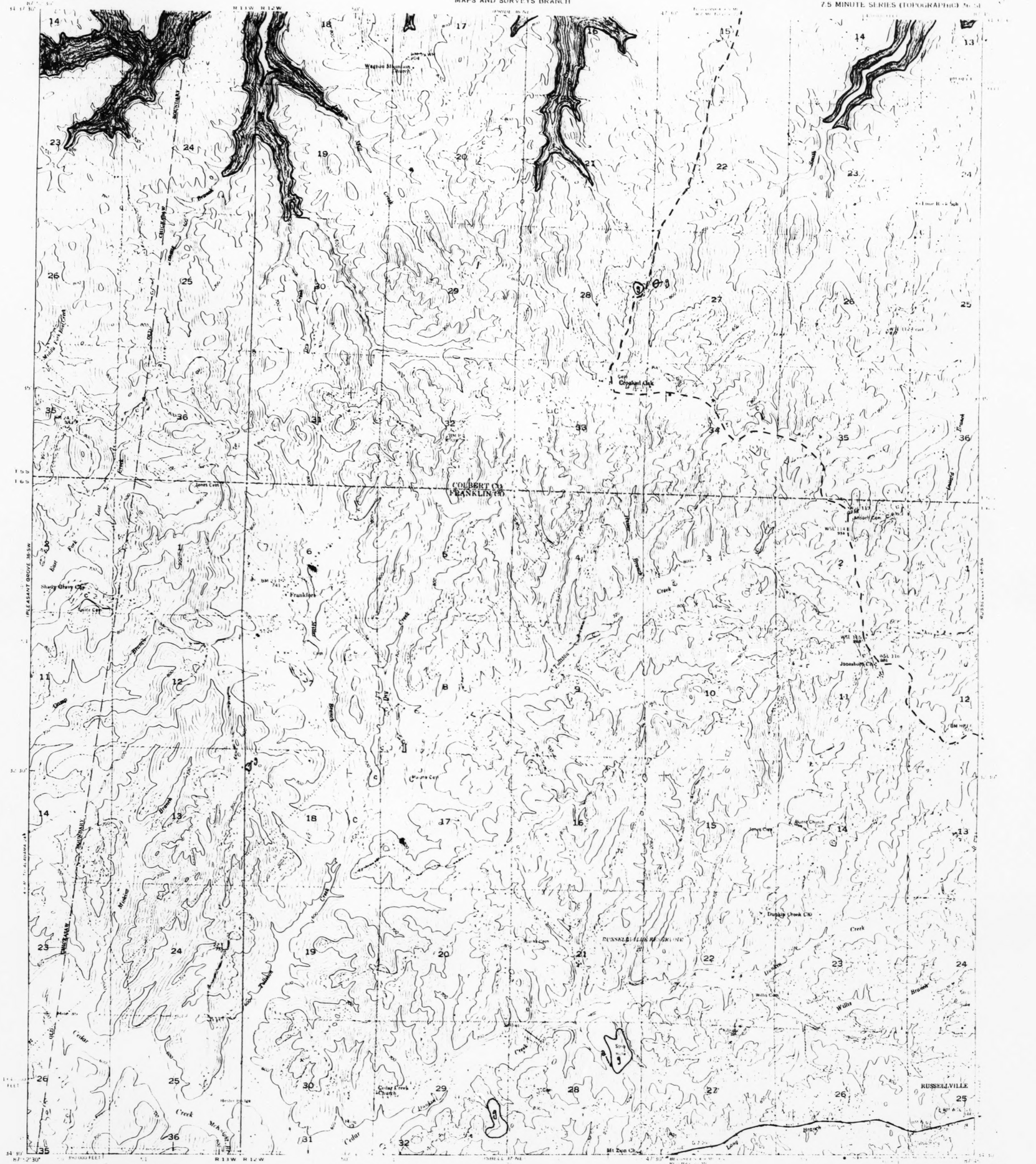
Quadrangle does not contain land slides or related features

82-181 E-1 v.1 1983

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

FRANKFORT QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by multiplex methods from aerial photographs taken 1950. Field examination by TVA, 1957

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama (West) rectangular coordinate system

1000-meter Universal Transverse Mercator grid ticks, Zone 16, shown in blue

FRANKFORT, ALA.

1957

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980–1981
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LANDSLIDES AND RELATED FEATURES

OF THE FRANKFORT, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

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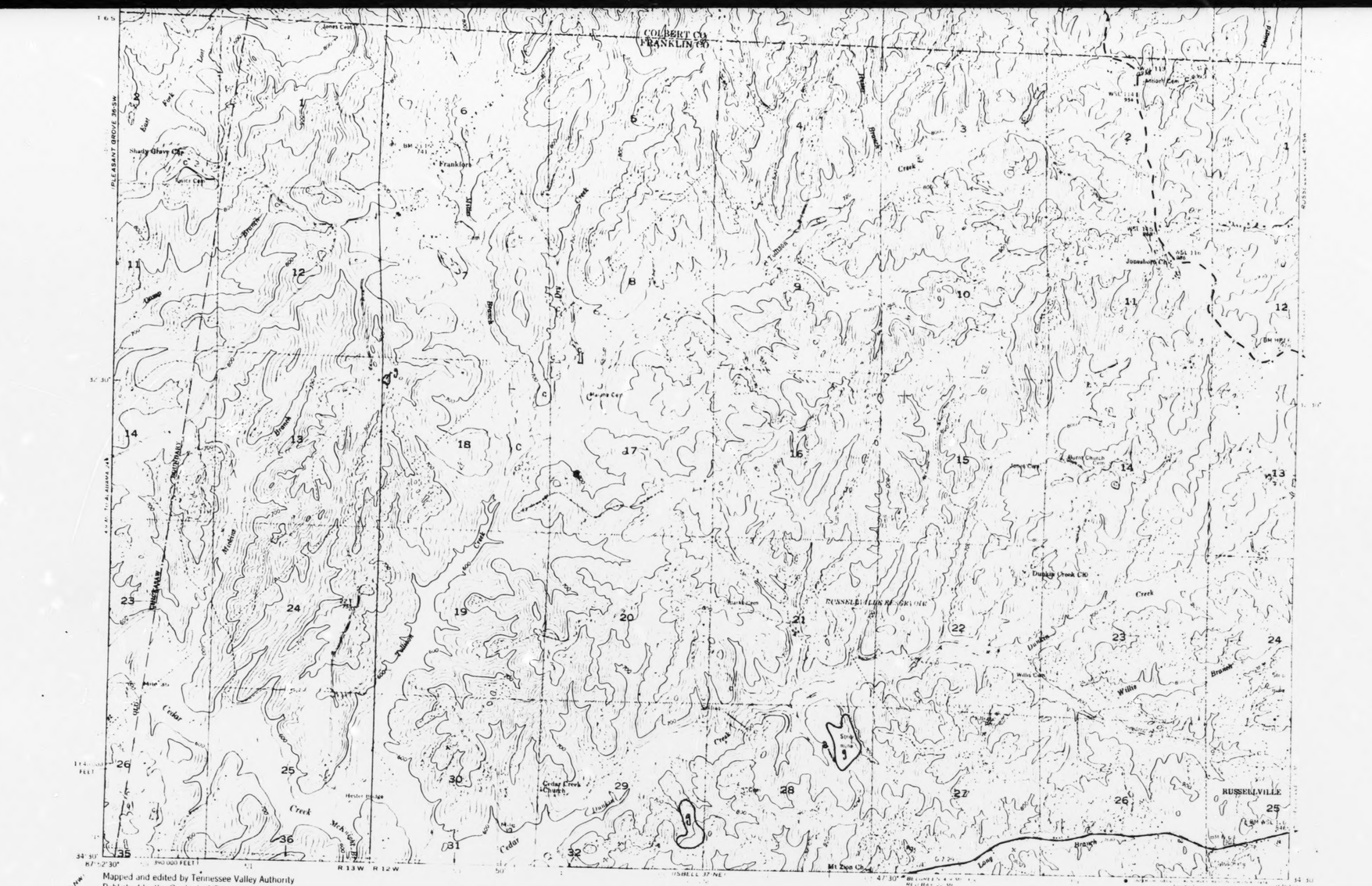

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Control by USC&GS, USGS, and TVA

Topography by multiplex methods from aerial photographs taken 1950. Field examination by TVA, 1957

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (West) rectangular coordinate system

1000 meter Universal Transverse Mercator Grid ticks, Zone 16, shown in blue

SCALE 1:24(xx)

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

APPROXIMATE MEAN DECLINATION 1967

ROAD CLASSIFICATION

Heavy duty — Light duty
Medium duty — Poor motor road
U.S. Route — State Route

QUADRANGLE LOCATION

FRANKFORT, ALA.
N3430—W8745/7.5

1957

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S. Geological Survey editorial standards

ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE FRANKFORT, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (E-L)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown, primarily valley floors, ridge tops and broad benches, modification by excavation and fill may lead to local landslides. Individual small landslides are sparse.

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

NOTE

Information shown is intended as a general guide to ground conditions as of the date of field check. Additional landslides and rockfalls should be anticipated in all map units. The map unit depicts the dominant condition in the area delineated and variations in slope stability may occur at any point in the unit. This map is suitable for general planning purposes and as a supplement to more detailed studies for site selection. The map cannot be used as a substitute for detailed geologic and engineering investigations to establish design and construction criteria of specific sites. Some symbols may not appear on this map because the description is applicable to a series of maps.

MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

- sh — bench with high wall
- sf — furrowed with high wall
- sd — multiple furrows and multiple benches
- ss — hilltop removed
- srg — reclaimed by grading
- sru — reclaimed by secondary use
- sh/r — regraded in part, high wall remains

Coal refuse banks

- r — identified on aerial photographs; not classified in field check
- rb — not burnt nor on fire
- rbb — burnt
- rbd — burning
- rbs — sludge

Quarries

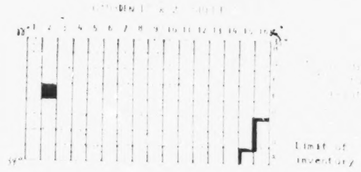
- q — quarry site
- qub — spoil bank, quarry waste

Gravel pits

- g — site of gravel pit

Slides in man-made features

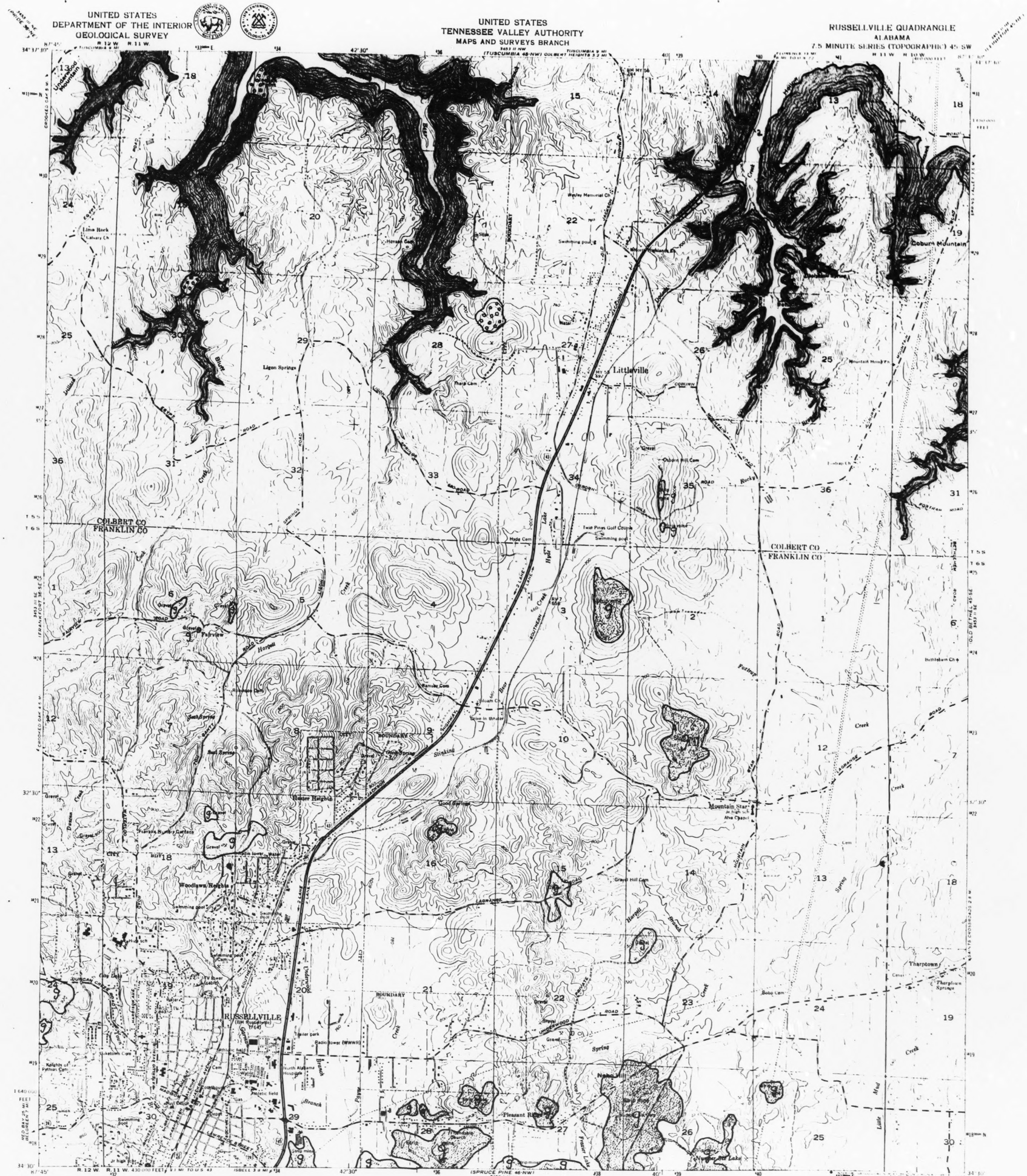
- af — earth flow in fill
- a/s — earth flow in strip castings
- a/r — earth flow in coal refuse



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

RUSSELLVILLE QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 45 SW



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Revised by TVA in 1980 by photogrammetric methods using aerial photographs taken 1967 and by reference to TVA USGS quadrangle dated 1957. Map field checked by TVA 1971

Polyconic projection. 1927 North American Datum
10 000-foot grid based on Alabama (West) rectangular coordinate system
1000-meter Universal Transverse Mercator Grid ticks

UTM GRID AND 1972 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

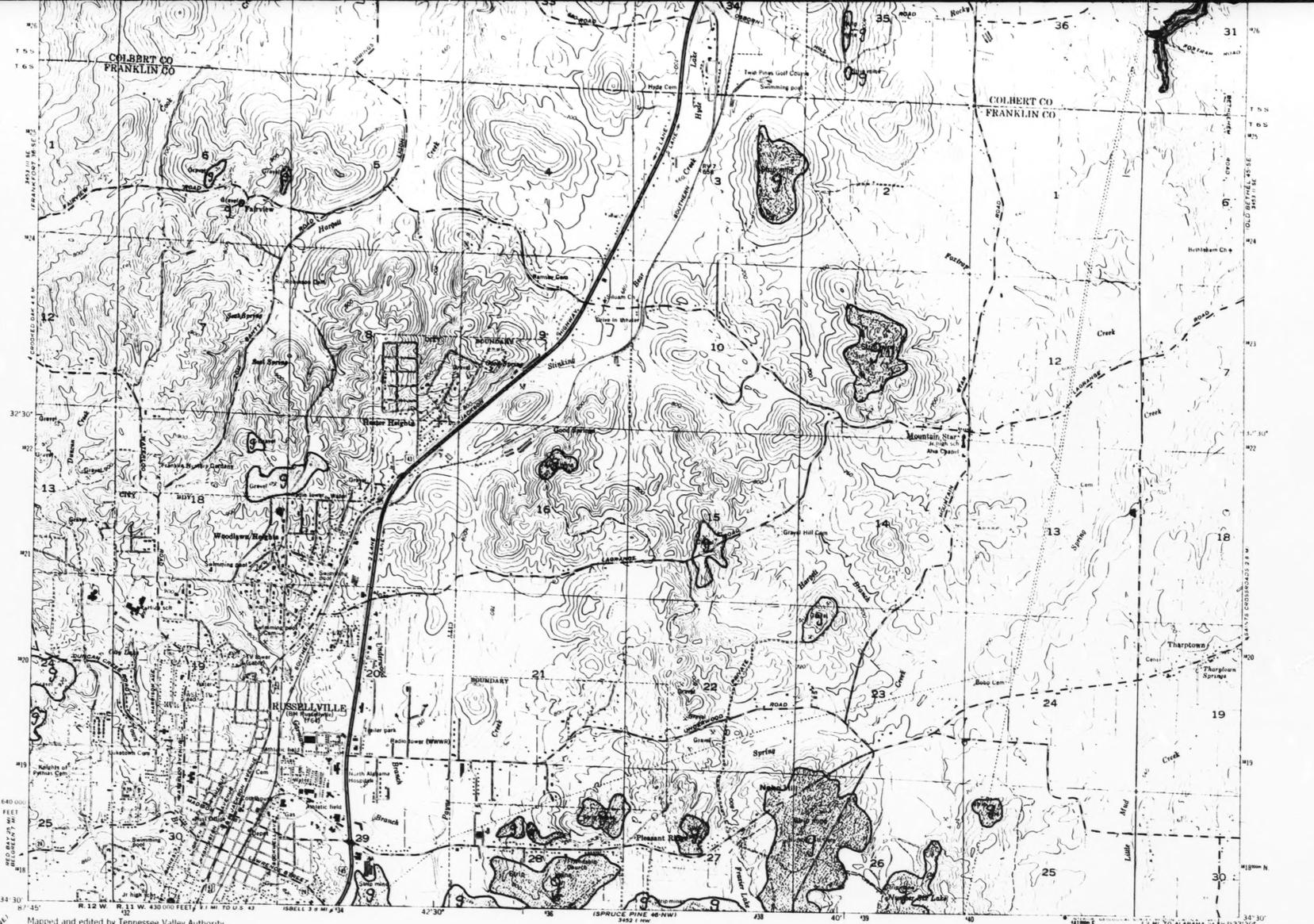
Photointerpretation and field check 1980-1981

LANDSLIDES AND RELATED FEATURES

OF THE RUSSELLVILLE, ALA. QUADRANGLE

NOTE

Information shown is intended as a general guide to ground conditions as of the date of field check. Additional landslides and rockfalls should be anticipated in all map units. The map unit depicts the dominant condition in the area delineated and variations in slope stability may occur at any point in the unit. This map is suitable for general planning purposes and



Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial standards

ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE RUSSELLVILLE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (E-3)

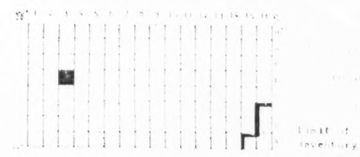
AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS THAT NEED TO BE INVESTIGATED
Map areas in which no patterns of landslides are shown, as in hilly, valley, stony ridge top, and broad benches, modification by excavation and fill has led to local landslides. In this [illegible] landslides are [illegible]

The first two digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map sheet on file and their shown in the diagram to the right. The location of this quadrangle is shown by the black square.



NOTE
Information shown is intended as a general guide to ground conditions as of the date of field check. Additional landslides and rockfalls should be anticipated in all map units. The map unit depicts the dominant condition in the area delineated and variations in slope stability may occur at any point in the unit. This map is suitable for general planning purposes and as a supplement to more detailed studies for site selection. The map cannot be used as a substitute for detailed geologic and engineering investigations to establish design and construction criteria of specific sites. Some symbols may not appear on this map because the description is applicable to a series of maps.

MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)
- sh — bench with high wall
- sf — furrowed with high wall
- sd — multiple furrows and multiple benches
- ss — hilltop removed
- srg — reclaimed by grading
- sru — reclaimed by secondary use
- sh/r — regraded in part, high wall remains

Coal refuse banks
- r — identified on aerial photographs; not classified in field check
- rb — not burnt nor on fire
- rbb — burnt
- rbd — burning
- rbs — sludge

Quarries
- q — quarry site
- qub — spoil bank, quarry waste

Gravel pits
- g — site of gravel pit

Slides in man-made features
- af — earth flow in fill
- a/s — earth flow in strip castings
- a/r — earth flow in coal refuse

UNITED STATES
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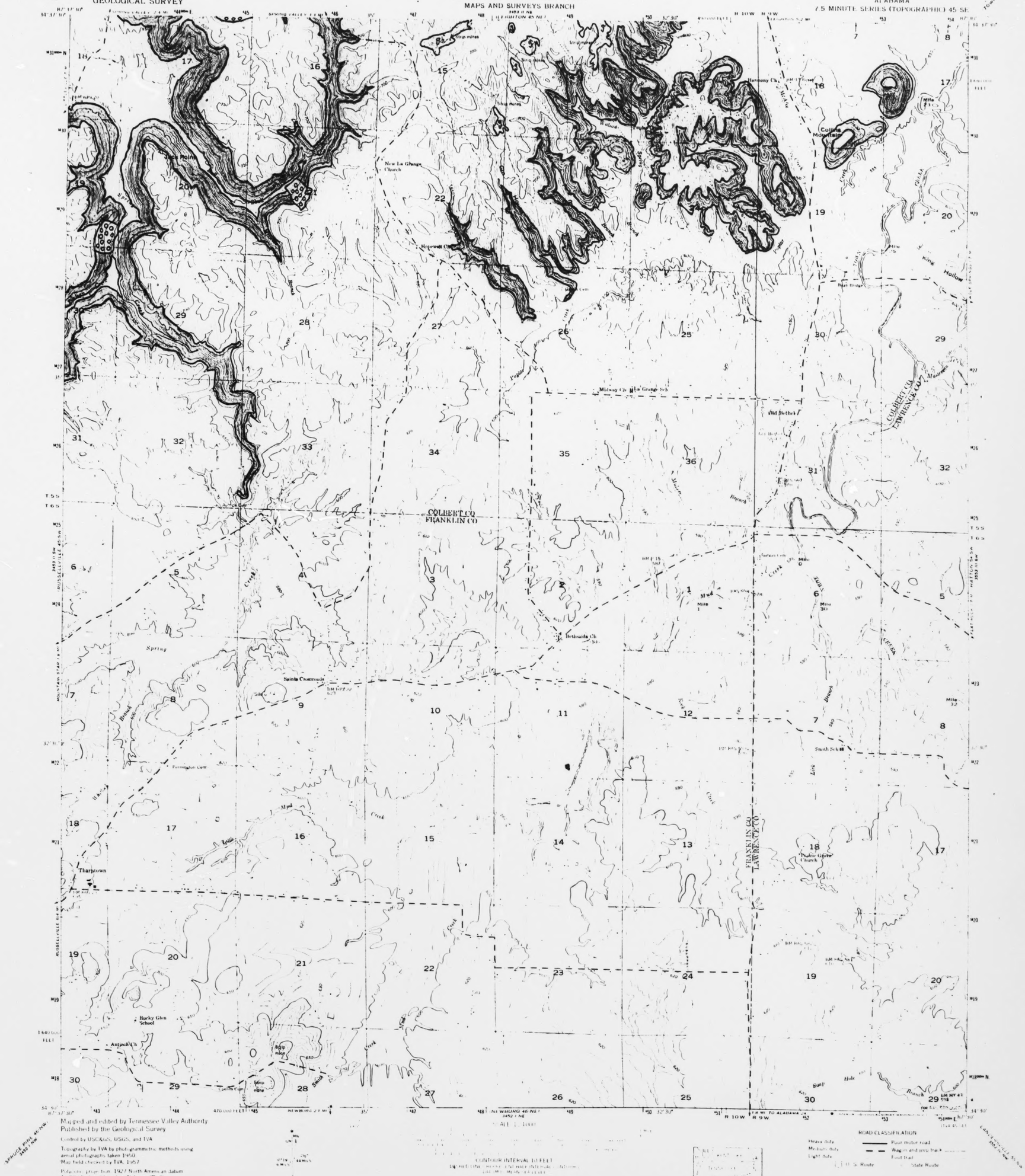
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

OLD BETHEL QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 45 SE



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by TVA by photogrammetric methods using aerial photographs taken 1950.
Map field checked by TVA, 1957

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama (West) rectangular coordinate system
100-meter Universal Transverse Mercator grid ticks

CONTOUR INTERVAL 10 FEET

ROAD CLASSIFICATION

Heavy duty — Poor motor road
Medium duty — Wagon and jeep trail
Light duty — Foot trail
U.S. Route — State Route

OLD BETHEL, ALA.
N4445—W8752.5/7.5
1957
PHOTOREVISED 1972

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981

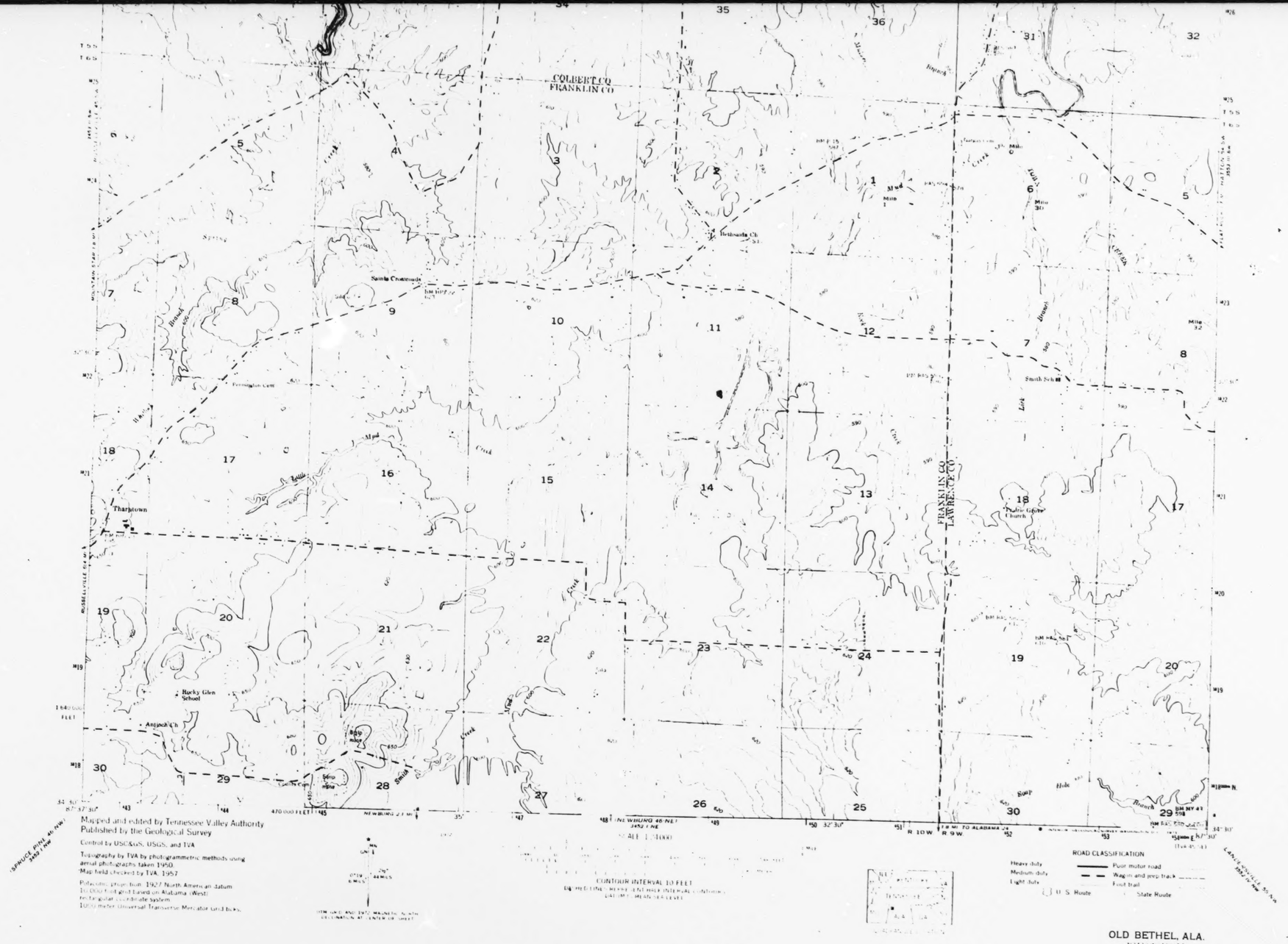
LANDSLIDES AND RELATED FEATURES

OF THE OLD BETHEL, ALA. QUADRANGLE

by

NOTE

Information shown is intended as a general guide to ground conditions as of the date of field check. Additional landslides and rockfalls should be anticipated in all map units. The map unit depicts the dominant condition in the area delineated and variations in slope stability may occur at any point in the unit. This map is suitable for general planning purposes and as a



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by TVA by photogrammetric methods using aerial photographs taken 1950.
Map field checked by TVA 1957

Polyconic projection 1927 North American datum
10,000 foot grid based on Alabama (West) rectangular coordinate system
1000 meter Universal Transverse Mercator grid ticks

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial standards

ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE OLD BETHEL, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (E-4)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS MOST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown, primarily, valley floors, ridge tops and broad benches, modification by excavation and fill may lead to local landslides. In both, large landslides are quite r

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

NOTE

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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

- sh bench with high wall
- sf furrowed with high wall
- sd multiple furrows and multiple benches
- ss hilltop removed
- srg reclaimed by grading
- sru reclaimed by secondary use
- sh/r regraded in part, high wall remains

Coal refuse banks

- r identified on aerial photographs; not classified in field check
- rb not burnt nor on fire
- rbb burnt
- rbd burning
- rbs sludge

Quarries

- q quarry site
- qub spoil bank, quarry waste

Gravel pits

- g site of gravel pit

Slides in man-made features

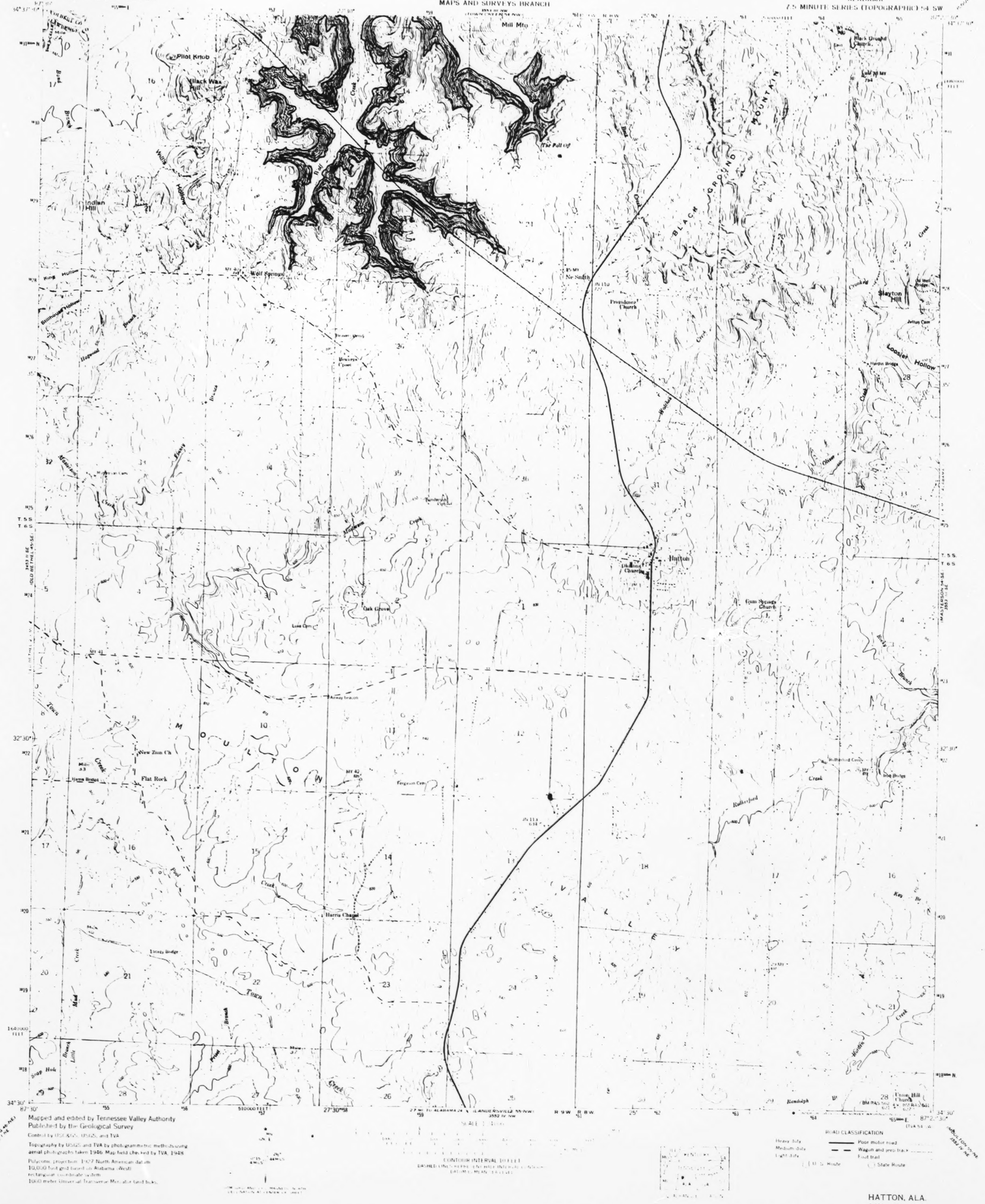
- af earth flow in fill
- a/s earth flow in strip cast
- a/r earth flow in coal refuse

limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

HATTON QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 34 SW



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods using aerial photographs taken 1946. Map field checked by TVA, 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (West)
rectangular coordinate system
1000 meter Universal Transverse Mercator grid ticks

CONTOUR INTERVAL 10 FEET

ROAD CLASSIFICATION

Heavy duty — Poor motor road
Medium duty — Wagon and jeep track
Light duty — Foot trail
( ) U.S. Route ( ) State Route

HATTON, ALA.
1948

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/U.S Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE HATTON, ALA. QUADRANGLE

by

John S. Pomeroy

1982

NOTE

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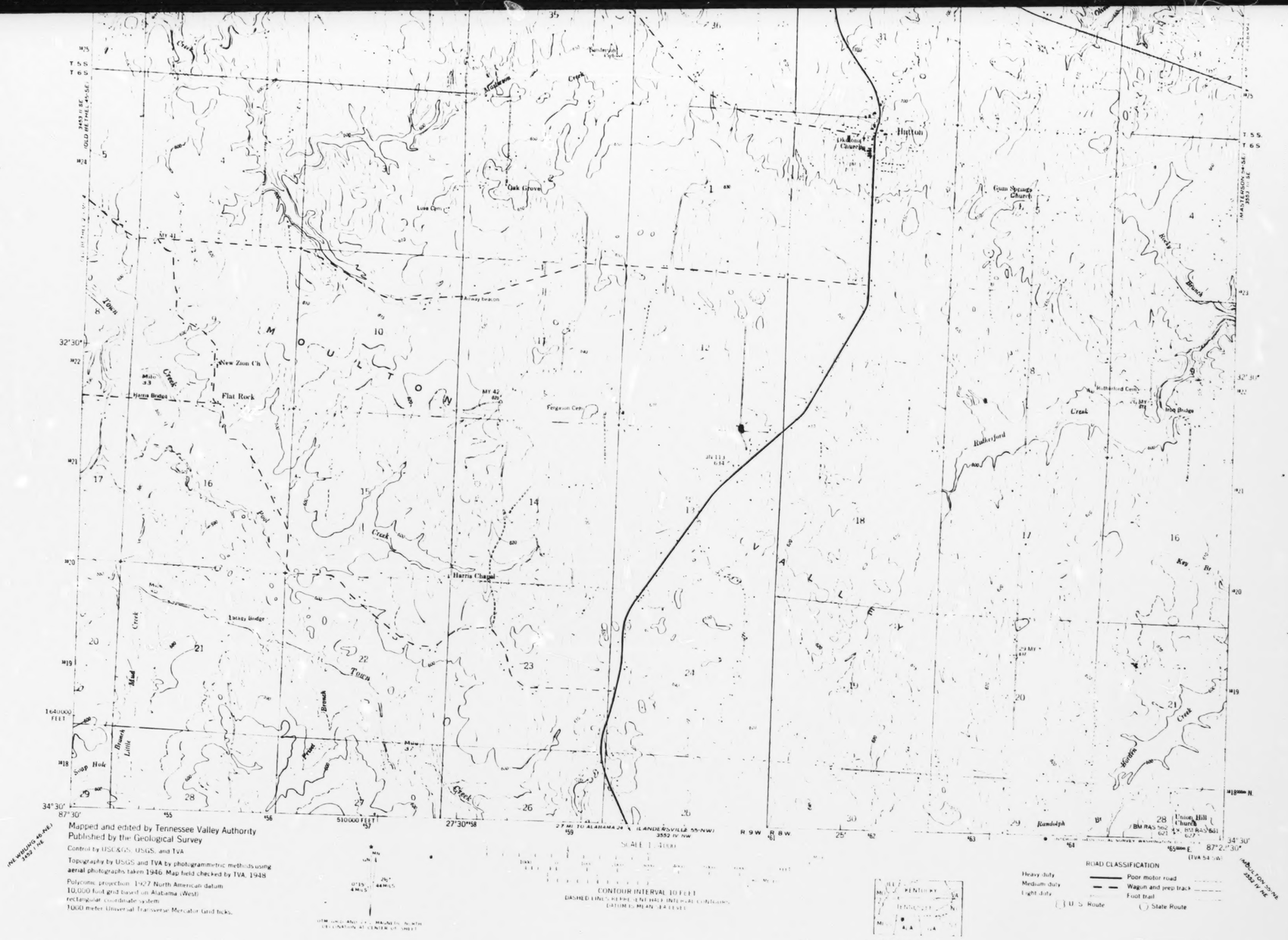

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods using aerial photographs taken 1946. Map field checked by TVA, 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (West) rectangular coordinate system
1000 meter Universal Transverse Mercator grid ticks

HATTON, ALA.

1948

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S. Geological Survey editorial standards

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Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE HATTON, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (E-5)

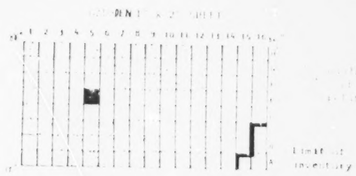
AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches, modification by excavation and fill may lead to local landslides. Include a few short landslides [illegible]

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.



NOTE
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MAN-MADE FEATURES
Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)
- sh bench with high wall
- sf furrowed with high wall
- sd multiple furrows and multiple benches
- ss hilltop removed
- srg reclaimed by grading
- sru reclaimed by secondary use
- sh/r regraded in part, high wall remains

Coal refuse banks
- r identified on aerial photographs; not classified in field check
- rb not burnt nor on fire
- rbb burnt
- rbd burning
- rbs sludge

Quarries
- q quarry site
- qub spoil bank, quarry waste

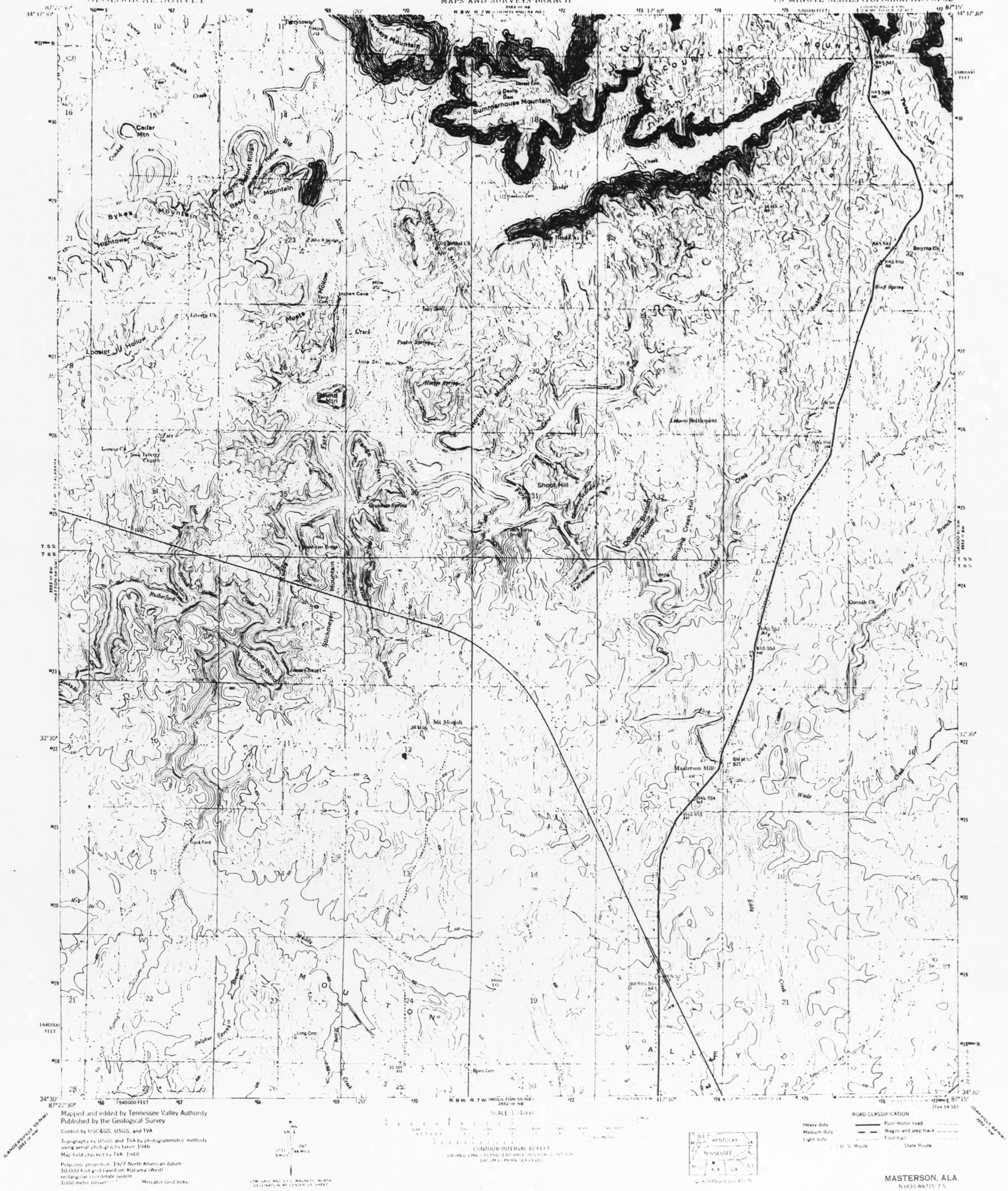
Gravel pits
- g site of gravel pit

Slides in man-made features
- af earth flow in fill
- a/s earth flow in strip castings
- a/r earth flow in coal refuse

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

MASTERSON QUADRANGLE
ALABAMA LAWRENCE CO
7½ MINUTE SERIES (TOPOGRAPHIC) 54 SE



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods using aerial photographs taken 1946

Map field checked by TVA 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (West)
rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks

GN
MN
3 MILS
29°
44 MILS

UTM GRID AND 1948 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

ROAD CLASSIFICATION

Heavy duty	Poor motor road
Medium duty	Wagon and jeep track
Light duty	Foot trail
U. S. Route	State Route

KENTUCKY
TENNESSEE
MISS. ALA. GA. S.C.

MASTERSON, ALA.
N3430 W8715/7.5
1948

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

LANDSLIDES AND RELATED FEATURES

OF THE MASTERSON, ALA. QUADRANGLE

NOTE

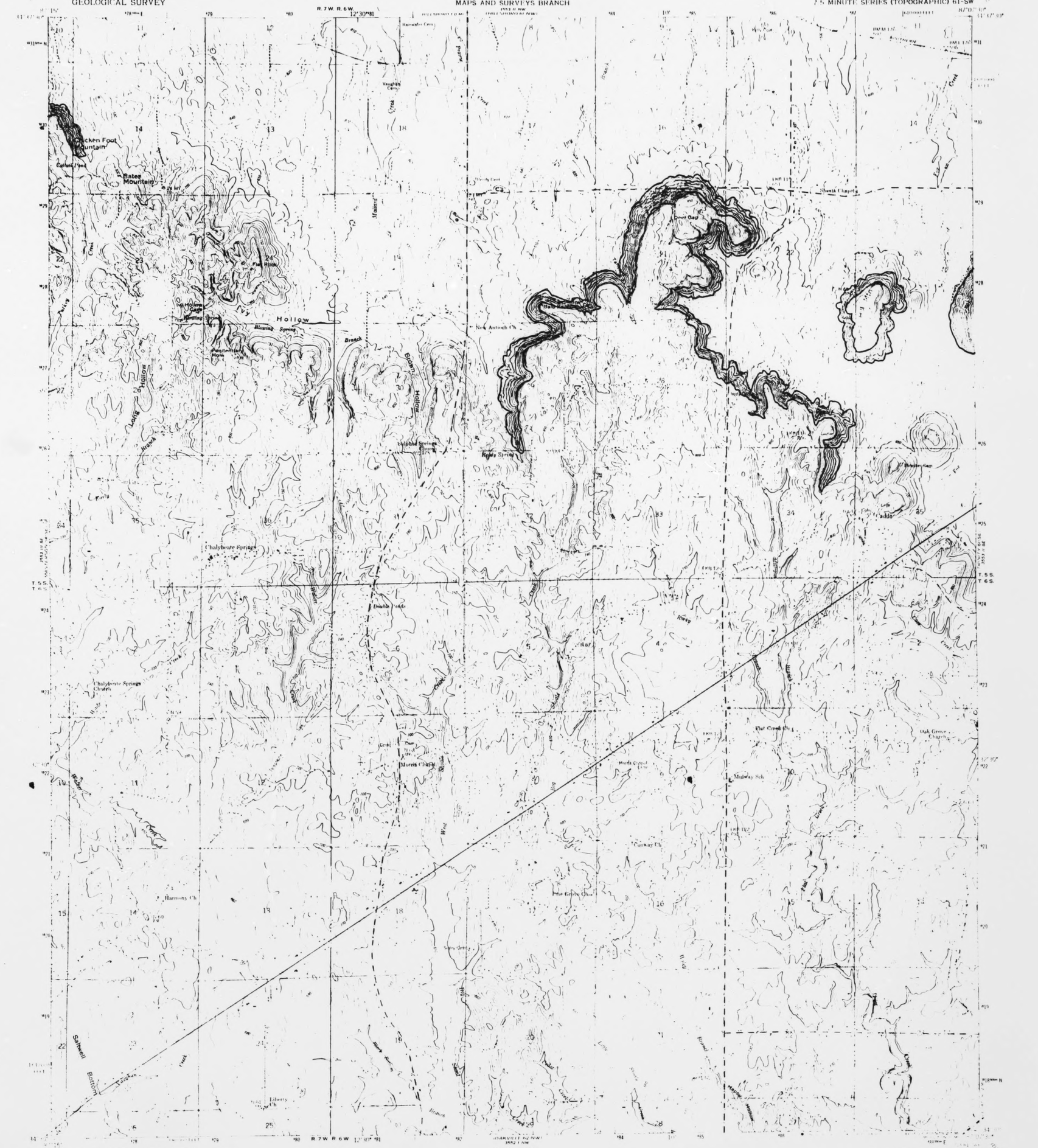
Information shown is intended as a general guide to ground conditions as of the date of field check. Additional landslides and rockfalls hould be anticipated in all map units. The map unit depicts the dominant condition in the area delineated and variations in slope stability may occur

Shoot Kill
Double Branch Hollow
Simpson Creek Hill
Mt Mogiah
Masterson Mill
Wade
Stickney
Mountain
Rutherford
Creek
Branch
Valley
Creek
Mile
10
Long Cem
Byars Cem
Track Ford
Spring
Creek
Cornish Ch
Emily
Brandt
Twelve
Creek
Valley
Creek
Creek
Creek

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

CADDO QUADRANGLE
ALABAMA-LAWRENCE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC) 61-SW


R. 7 W. R. 6 W.
12°30"
Chicken Foot Mountain
Bates Mountain
Flat Rock
Ivy Hollow
Ivy Branch
Hollow
Spring
Branch
Elam Hollow
Hubbard Springs Church
Reedy Spring
Chalybeate Springs
Chalybeate Springs Church
Double Forks
Morris Chapel
Harmony Ch
Liberty Ch
Saltwell Bottom
Saltwell
Bottom
Creek
Creek
Creek

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

CADDO, ALA.

1948

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE CADDO, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (E-7)

ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

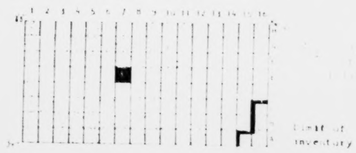
AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown, primarily valley floors, ridge tops and local benches; modification by excavation and fill may lead to local landslides. Include areas where landslides are sparse.

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.



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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

sh	bench with high wall
sf	furrowed with high wall
sd	multiple furrows and multiple benches
ss	hilltop removed
srg	reclaimed by grading
sru	reclaimed by secondary use
sh/r	regraded in part, high wall remains

Coal refuse banks

r	identified on aerial photographs; not classified in field check
rb	not burnt nor on fire
rbb	burnt
rbd	burning
rbs	sludge

Quarries

q	quarry site
qub	spoil bank, quarry waste

Gravel pits

g	site of gravel pit

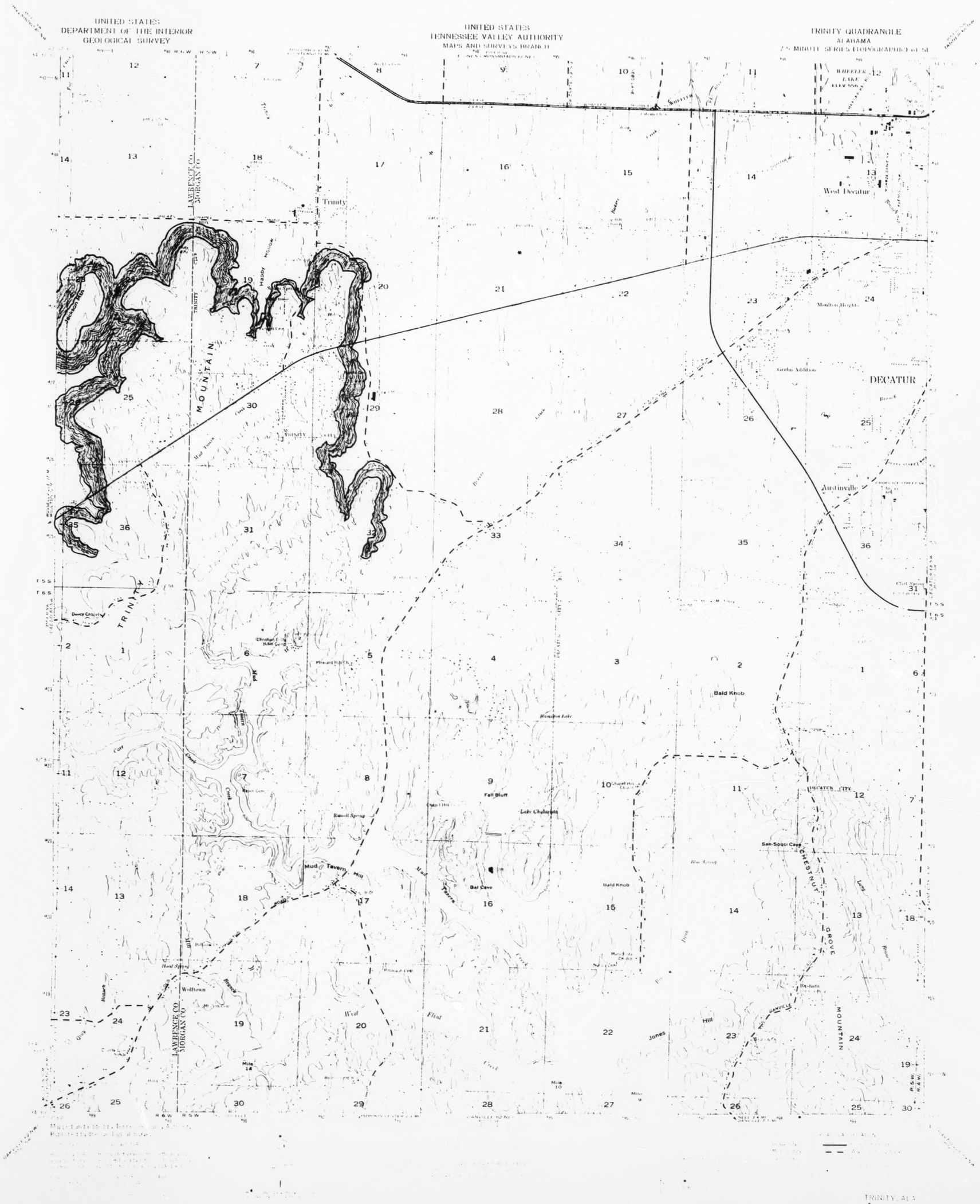
Slides in man-made features

af	earth flow in fill
a/s	earth flow in strip castings
a/r	earth flow in coal refuse

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

TRINITY QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC)



Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed

LANDSLIDES AND RELATED FEATURES

OF THE TRINITY, ALA. QUADRANGLE

by

NOTE

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TRINITY, ALA.

TRINITY, ALA.

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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LANDSLIDES AND RELATED FEATURES

OF THE TRINITY, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (E-8)

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Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

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Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; ridges, valley floors, ridge tops and broad benches, modification by excavation and fill may lead to local landslides. Includes type [illegible] landslides are quite [illegible]

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

- sh — bench with high wall
- sf — furrowed with high wall
- sd — multiple furrows and multiple benches
- ss — hilltop removed
- srg — reclaimed by grading
- sru — reclaimed by secondary use
- sh/r — regraded in part, high wall remains

Coal refuse banks

- r — identified on aerial photographs; not classified in field check
- rb — not burnt nor on fire
- rbb — burnt
- rbd — burning
- rbs — sludge

Quarries

- q — quarry site
- qub — spoil bank, quarry waste

Gravel pits

- g — site of gravel pit

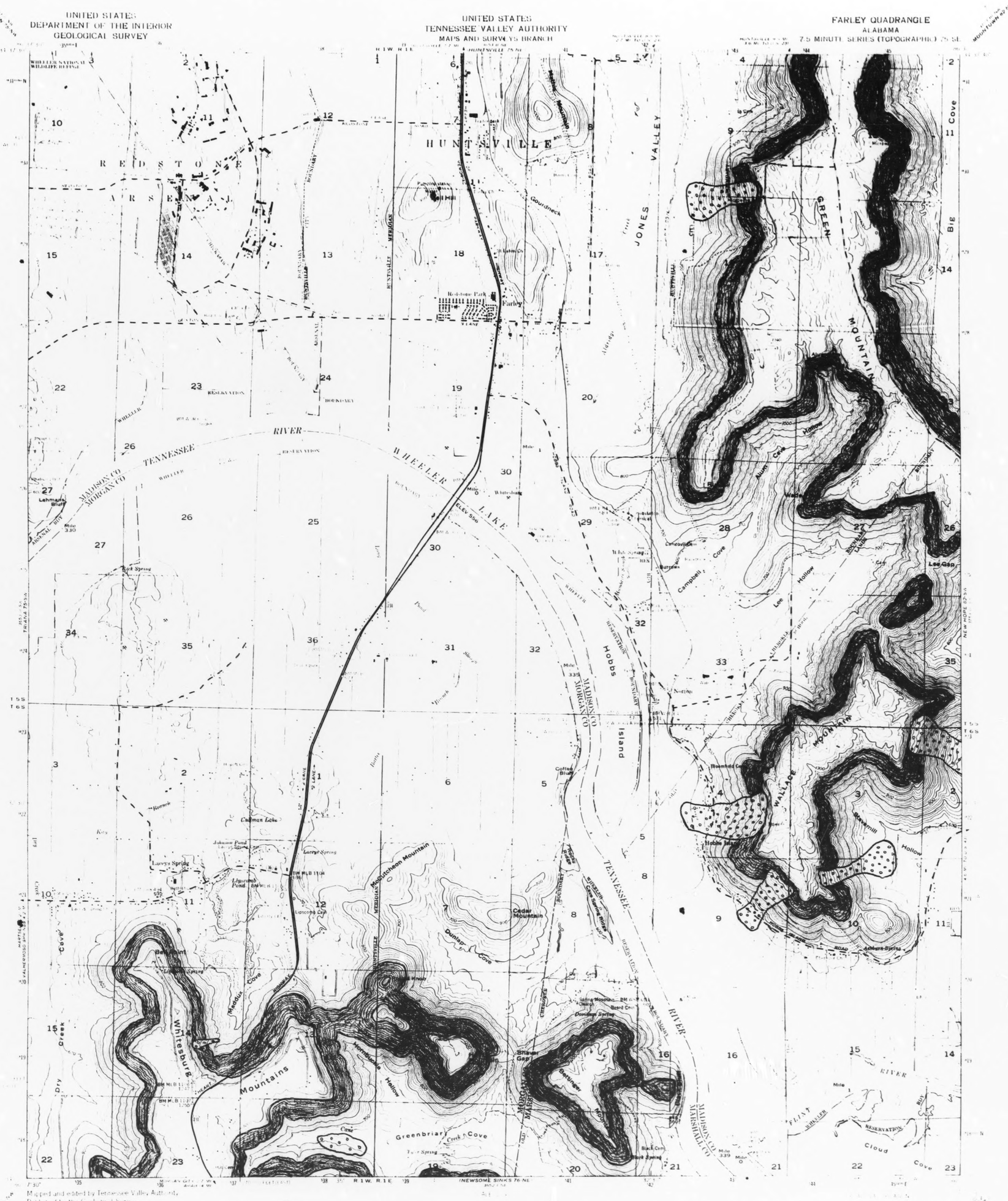
Slides in man-made features

- af — earth flow in fill
- a/s — earth flow in strip castings
- a/r — earth flow in coal refuse

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

FARLEY QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 75 SE



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

FARLEY, ALA.

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial

LANDSLIDES AND RELATED FEATURES

OF THE FARLEY, ALA. QUADRANGLE

by

John S. Pomeroy

NOTE

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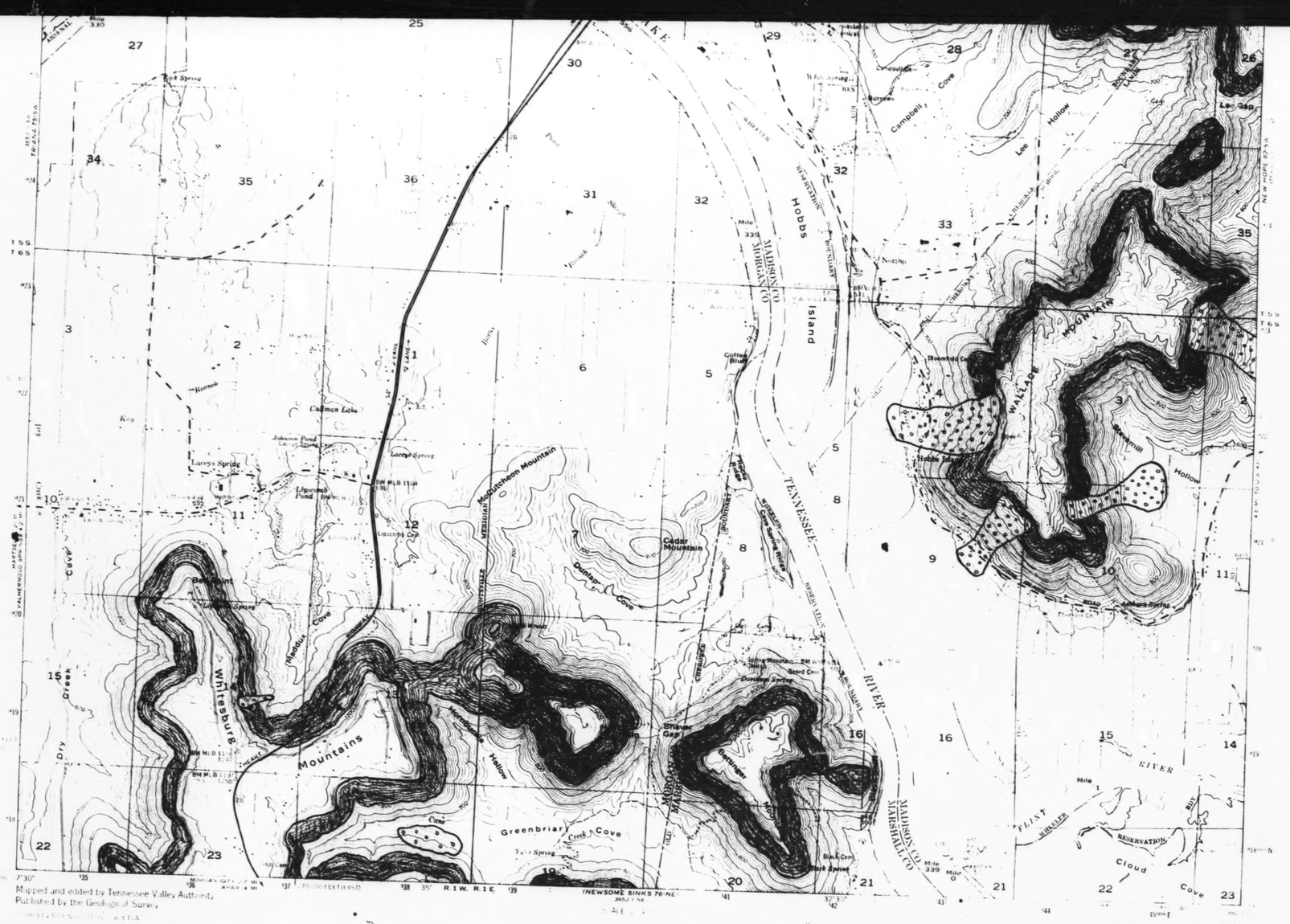

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LANDSLIDES AND RELATED FEATURES

OF THE FARLEY, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (E-12)

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AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches, modification by excavation and fill may lead to local landslides. Includes flood plains. Landslides are uncommon.

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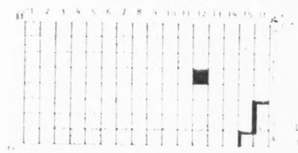

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- g — site of gravel pit

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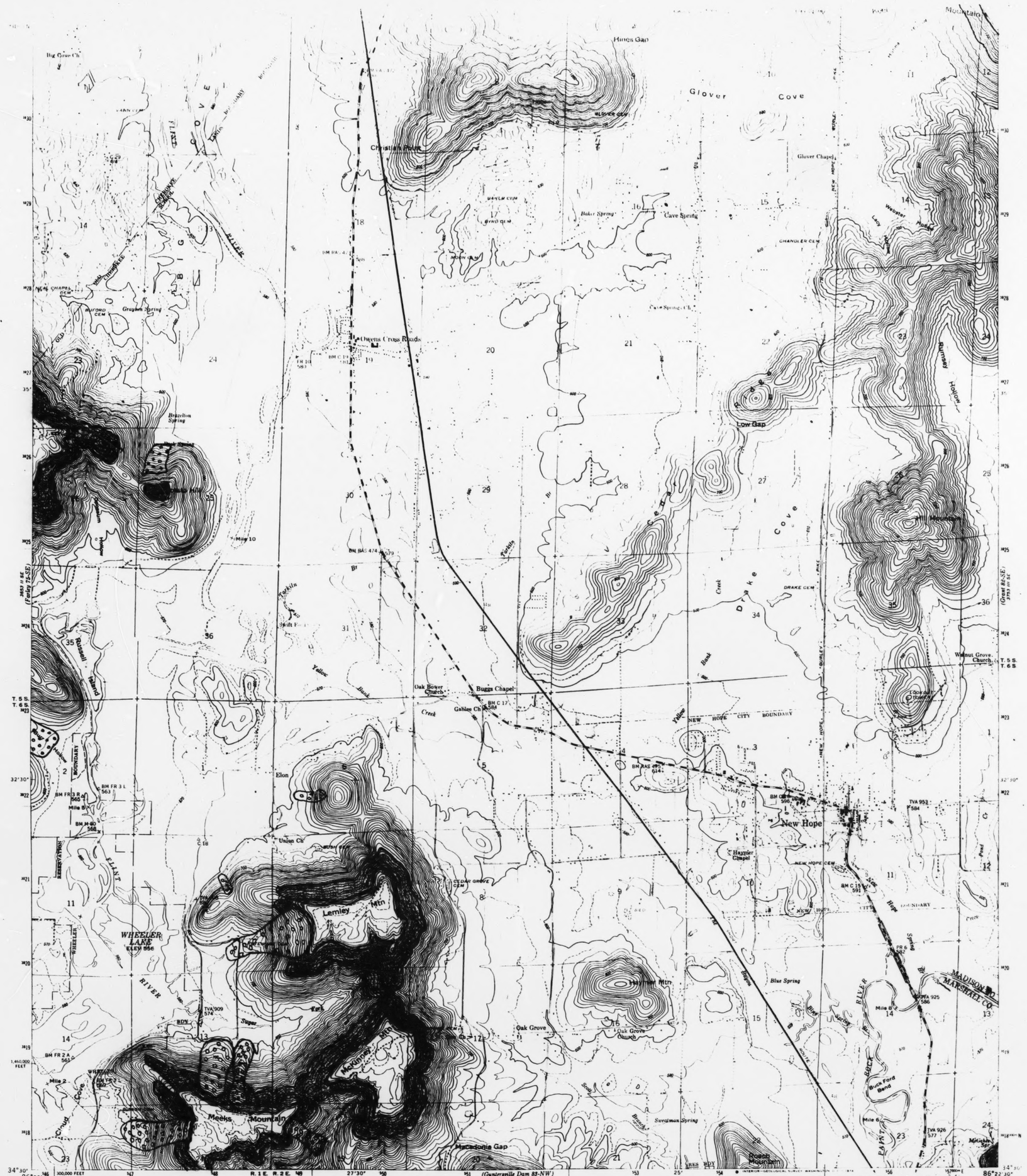

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, USED, and TVA

Topography by USGS and TVA by photogrammetric and planetable methods.
Map field checked by TVA, 1947

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama (East) rectangular coordinate systems
1000 meter Universal Transverse Mercator Grid ticks, Zone 16, shown in blue

SCALE 1:24000

CONTOUR INTERVAL 20 FEET
DASHED LINES REPRESENT HALF-INTERVAL CONTOURS
DATUM IS MEAN SEA LEVEL

UTM GRID AND 1978 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

ROAD CLASSIFICATION

Heavy duty	Poor motor road
Medium duty	Wagon and jeep trail
Light duty	Foot trail
U. S. Route	State Route

NEW HOPE, ALA.

1947

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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LANDSLIDES AND RELATED FEATURES

OF THE NEW HOPE, ALA. QUADRANGLE

by

John S. Pomeroy

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Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, USED, and TVA

Topography by USGS and TVA by photogrammetric and planetable methods.
Map field checked by TVA, 1947

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama (East) rectangular coordinate systems
1000 meter Universal Transverse Mercator Grid ticks, Zone 16, shown in blue

UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

Landslides and related features interpreted from aerial photographs:

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LANDSLIDES AND RELATED FEATURES

OF THE NEW HOPE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

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- rbb burnt
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- rbs sludge

Quarries
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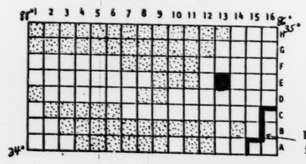
- qub spoil bank, quarry waste

Gravel pits
- g site of gravel pit

Slides in man-made features
- af earth flow in fill
- a/s earth flow in strip castings
- a/r earth flow in coal refuse

GADSDEN 1° x 2° SHEET



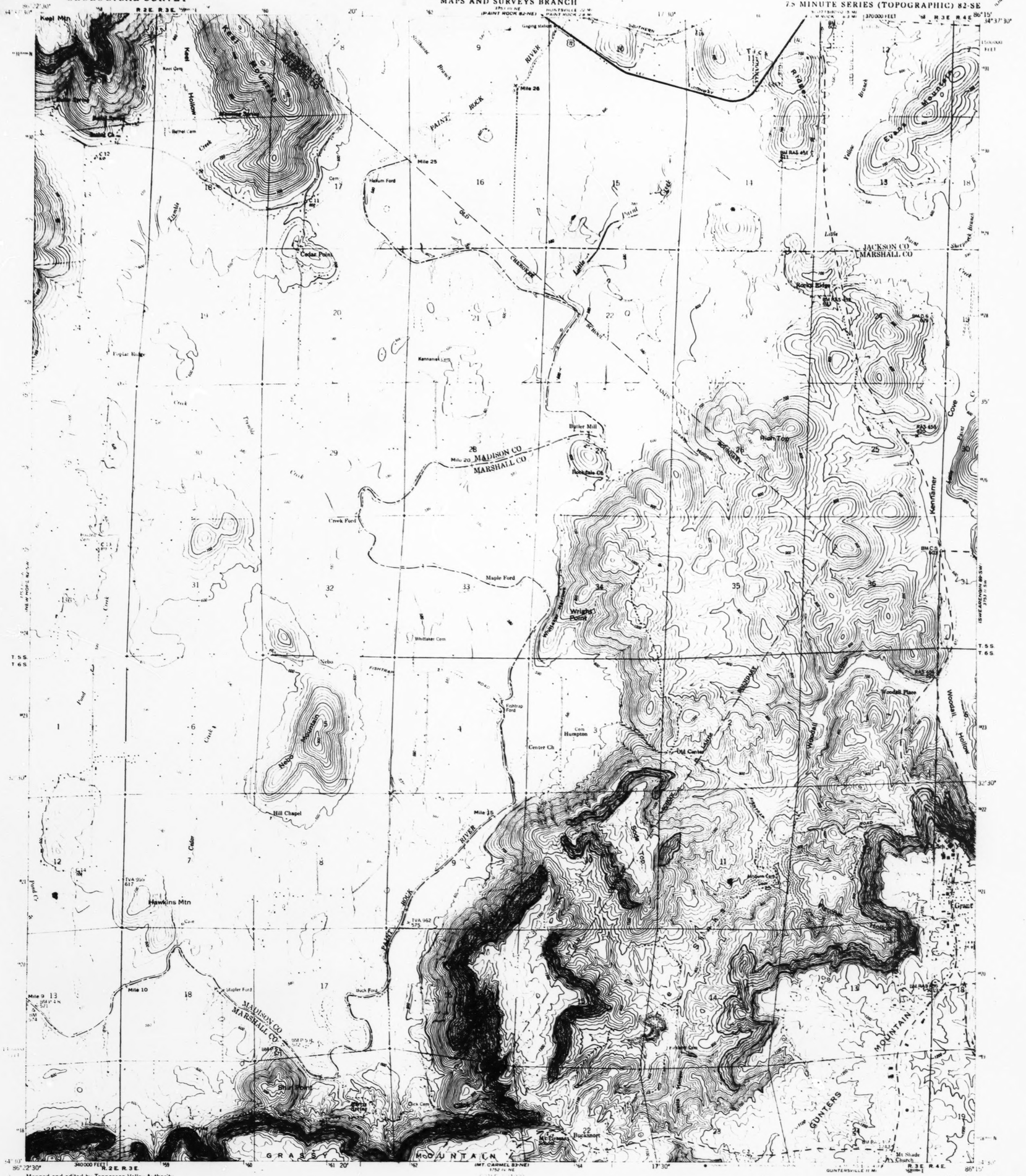
Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

GRANT QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 82-SE



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USE&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric and planimetric methods from aerial photographs taken 1971
Map field-checked by TVA, 1947

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama coordinate system, east zone
1000-meter Universal Transverse Mercator grid ticks, zone 16, shown in blue

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION
Primary road
Secondary road
Light-duty road
Unimproved road
U.S. Route
State Route

GRANT, ALA.
N3130—W8615.7/7.5
1947
AMS 5755 IV SE-SERIES V814

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been [illegible]

LANDSLIDES AND RELATED FEATURES

OF THE GRANT, ALA. QUADRANGLE

by

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Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric and planimetric methods using aerial photographs flown 1 Oct. - 4 Nov. 1947
Map field checked by TVA, 1947

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama coordinate system
1000 meter Universal Transverse Mercator grid ticks, Zone 16, shown in blue

SCALE 1:24000

CONTOUR INTERVAL 20 FEET
DASHED CONTOUR REPRESENTS HALF CONTOUR INTERVAL
NATIONAL GEODETIC VERTICAL DATUM OF 1929

UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

ROAD CLASSIFICATION
Heavy duty — Road in use
Medium duty — Weather and dry truck
Light duty — Trail
U.S. Route — State Route

GRANT, ALA.
N3130—W8615, 7.5
1947
AMS 5765 IV SE-SERIES V814

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/U.S. Geological Survey editorial standards

ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE GRANT, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (E-14)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; principally valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. On hills, slopes where landslides are sparse.

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

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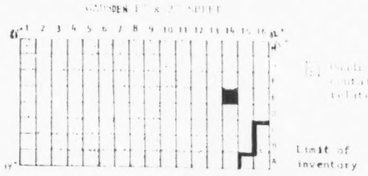
Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)
- sh — bench with high wall
- sf — furrowed with high wall
- sd — multiple furrows and multiple benches
- ss — hilltop removed
- srg — reclaimed by grading
- sru — reclaimed by secondary use
- sh/r — regraded in part, high wall remains

Coal refuse banks
- r — identified on aerial photographs; not classified in field check
- rb — not burnt nor on fire
- rbb — burnt
- rbd — burning
- rbs — sludge

Quarries
- q — quarry site
- qub — spoil bank, quarry waste

Gravel pits
- g — site of gravel pit

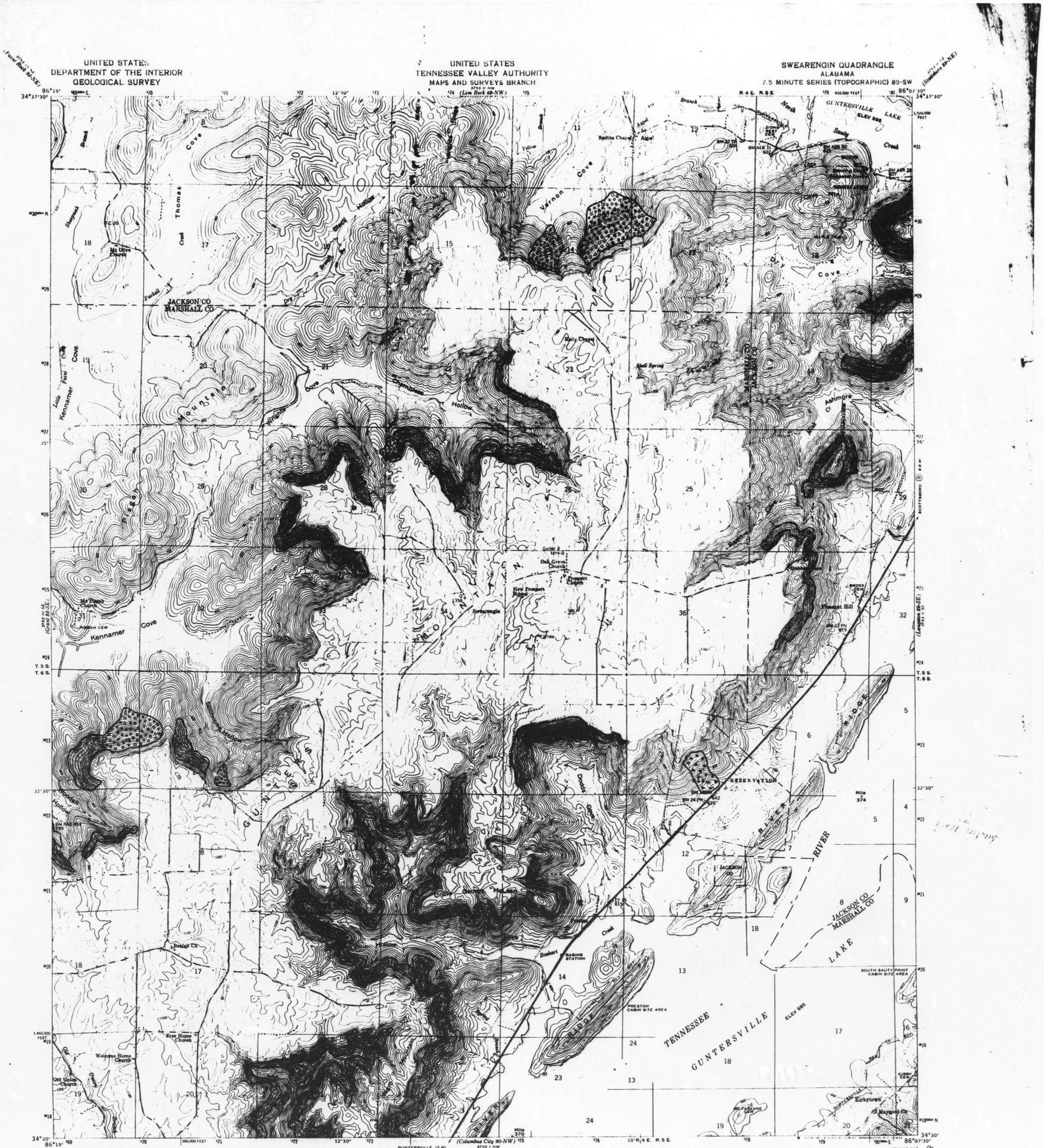
Slides in man-made features
- af — earth flow in fill
- a/s — earth flow in strip castings
- a/r — earth flow in coal refuse



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

SWEARENGIN QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 89-SW



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods.
Map field checked by TVA, 1947

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East)
rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks,
Zone 16, shown in blue

SCALE 1:24000

CONTOUR INTERVAL 20 FEET
DASHED LINES REPRESENT HALF-INTERVAL CONTOURS
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

UTM GRID AND 1970 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

ROAD CLASSIFICATION
Heavy duty — Four meter road
Medium duty — Wagon and jeep track
Light duty — Foot trail
U. S. Route
State Route

SWEARENGIN, ALA.
N3430—W8607.5/7.5
1947
AMS 3753 II SW-SERIES V844

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/U.S Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE SWEARENGIN, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

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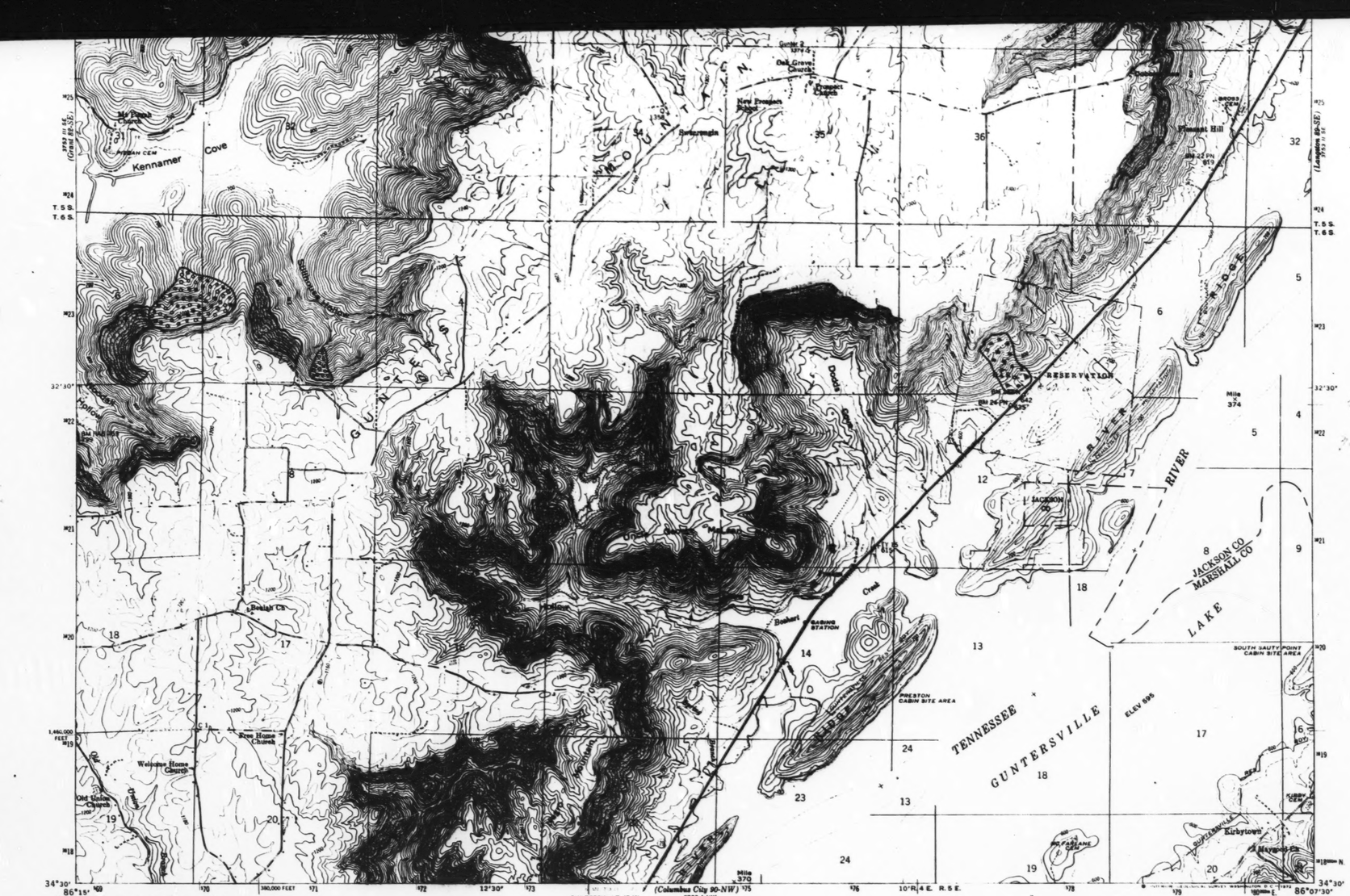

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Published by the Geological Survey

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Topography by USGS and TVA by photogrammetric methods.
Map field checked by TVA, 1947

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks, Zone 16, shown in blue

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
DASHED LINES REPRESENT HALF-INTERVAL CONTOURS
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

UTM GRID AND 1970 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Heavy duty	Four motor road	
Medium duty	Wagon and jeep track	
Light duty	Foot trail	
U. S. Route	State Route	

SWEARENGIN, ALA.

N3430—W8607.5/7.5

1947

AMS 3753 II SW-SERIES V844

Landslides and related features interpreted from aerial photographs:

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Photointerpretation and field check 1980-1981
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LANDSLIDES AND RELATED FEATURES

OF THE SWEARENGIN, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (E-15)

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NOTE
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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

sh	bench with high wall
sf	furrowed with high wall
sd	multiple furrows and multiple benches
ss	hilltop removed
srg	reclaimed by grading
sru	reclaimed by secondary use
sh/r	regraded in part, high wall remains

Coal refuse banks

r	identified on aerial photographs; not classified in field check
rb	not burnt nor on fire
rbb	burnt
rbd	burning
rbs	sludge

Quarries

q	quarry site
qub	spoil bank, quarry waste

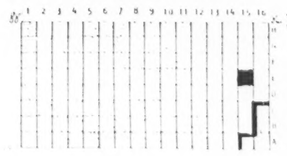
Gravel pits

g	site of gravel pit

Slides in man-made features

af	earth flow in fill
a/s	earth flow in strip castings
a/r	earth flow in coal refuse

GUNTERSVILLE 1° x 2° SHEET



UNITED STATES
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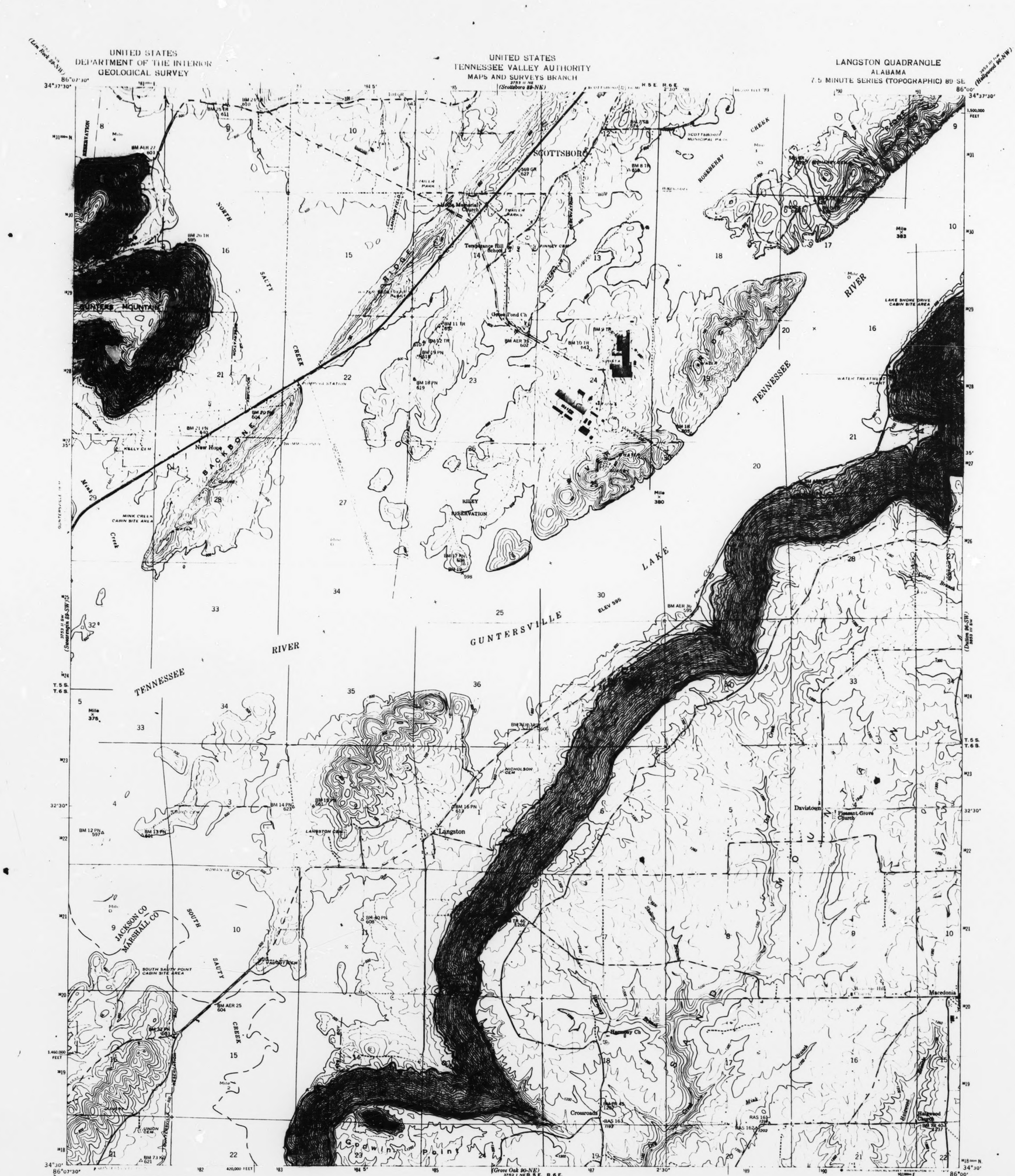
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

LANGSTON QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 89 SE



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods
Map field checked by TVA, 1947

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East)
rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks,
Zone 16, shown in blue

SCALE 1:24000

CONTOUR INTERVAL 20 FEET
DASHED LINES REPRESENT HALF-INTERVAL CONTOURS
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

UTM GRID AND 1970 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

ROAD CLASSIFICATION
Heavy-duty — Poor motor road
Medium duty — Wagon and jeep track
Light-duty — Foot trail
U. S. Route — State Route

LANGSTON, ALA.
N3430—W8600/7.5
1947
PHOTOREVISED 1978
AMS 3755 II SE-SERIES V844

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE LANGSTON, ALA. QUADRANGLE

by

John S. Pomeroy

NOTE

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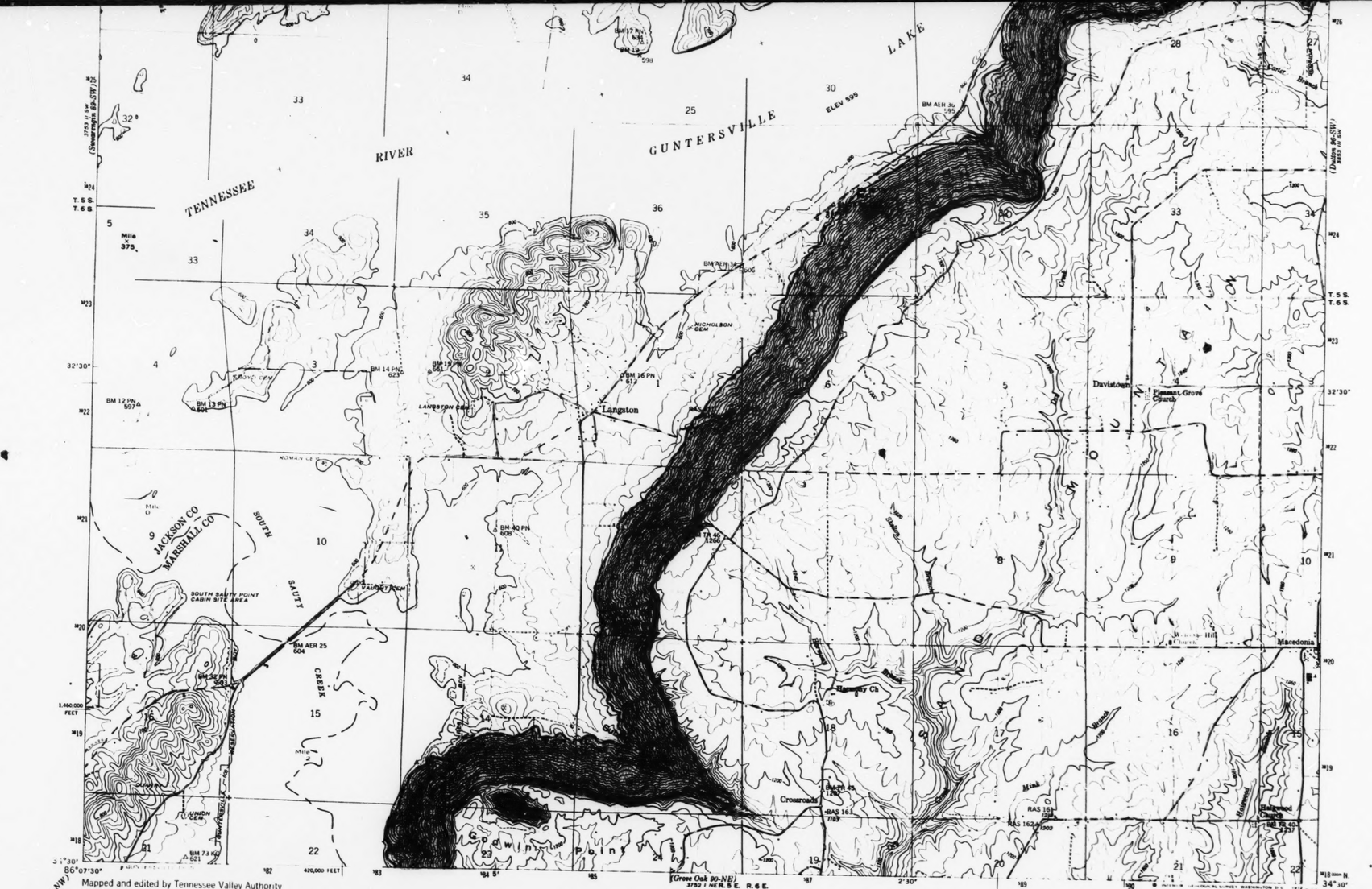

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Topography by USGS and TVA by photogrammetric methods
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LANGSTON, ALA.

N3430—W8600/7.5

1947

PHOTOREVISED 1970

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OF THE LANGSTON, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (E-16)

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- sh — bench with high wall
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- sd — multiple furrows and multiple benches
- ss — hilltop removed
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Coal refuse banks

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GEOLOGICAL SURVEY

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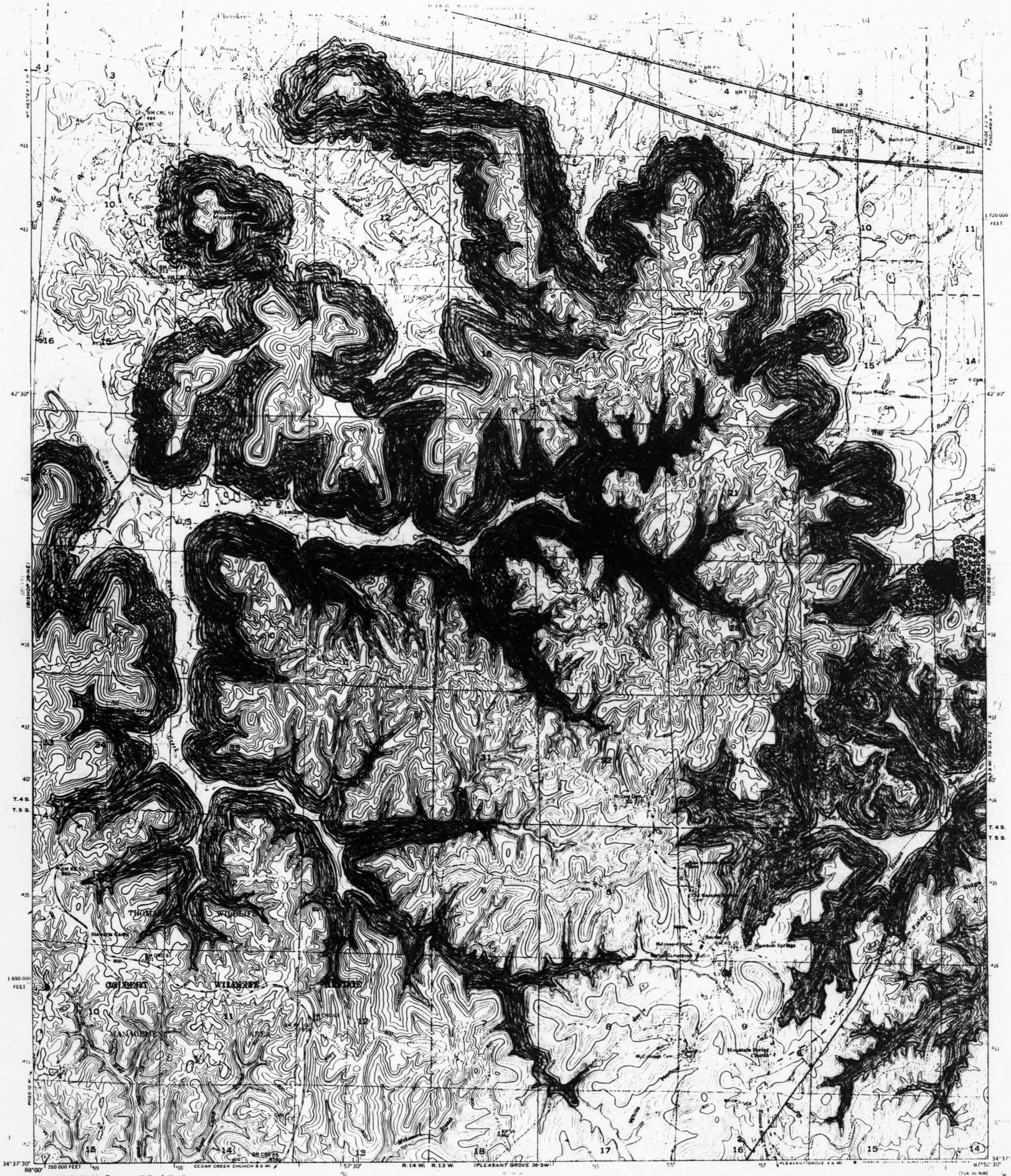
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

BARTON QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC)


Barton
Wildcat Mountain
Mountain Home Cem
Hamilton
THOMAS
WILCOX
COLBERT
MANAGEMENT AREA
Shiloh Cem
Mt Olive Cem
Mt Pleasant Cem
Bethlehem Cem
Mt Hebron Cem
Mt Zion Cem
Hopewell Cem
Bethel Cem
Mt Carmel Cem
Mt Gilead Cem
Mt Moriah Cem
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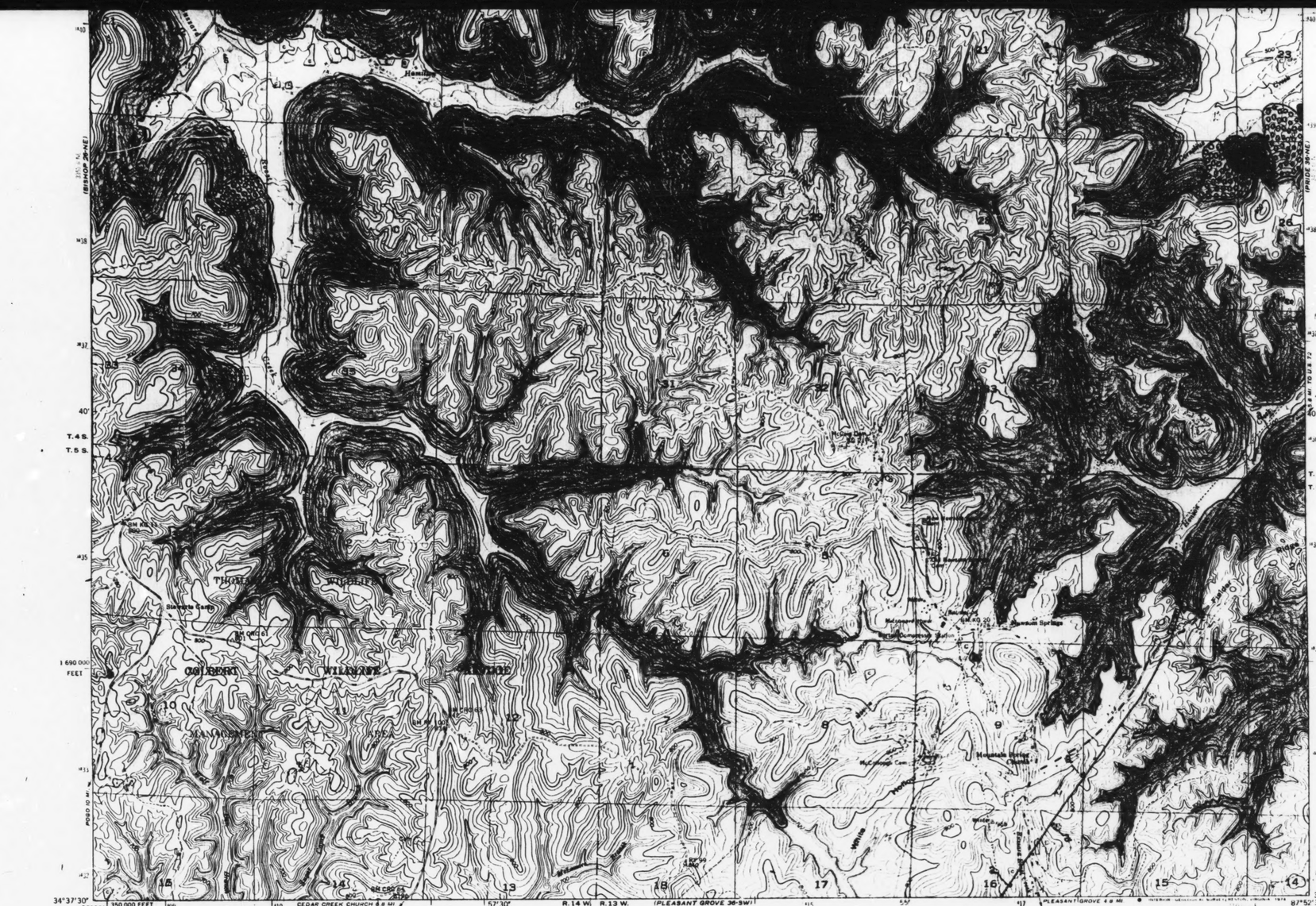

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OF THE BARTON, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (F-1)

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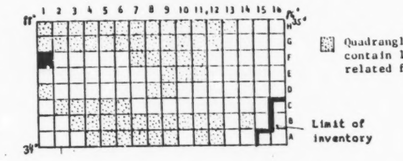
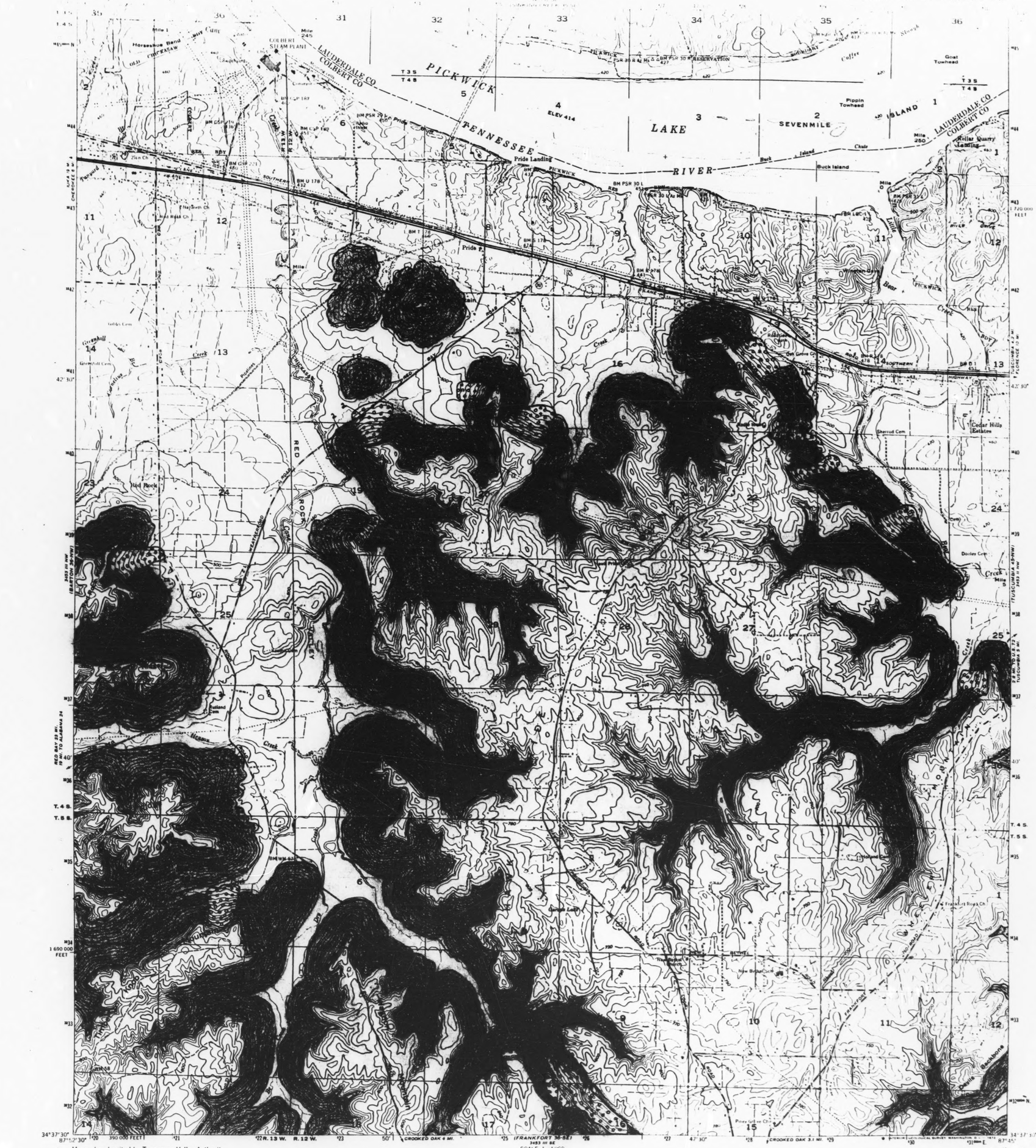
GADSDEN 1° x 2° SHEET



Quadrangle does not contain landslides or related features

Limit of inventory



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Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Revised by TVA in 1968 by photogrammetric methods using aerial photographs taken 1967 and by reference to TVA-USGS quadrangle dated 1954. Map field checked by TVA 1971

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (West) rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks.

UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed

LANDSLIDES AND RELATED FEATURES

OF THE PRIDE, ALA. QUADRANGLE

by

NOTE

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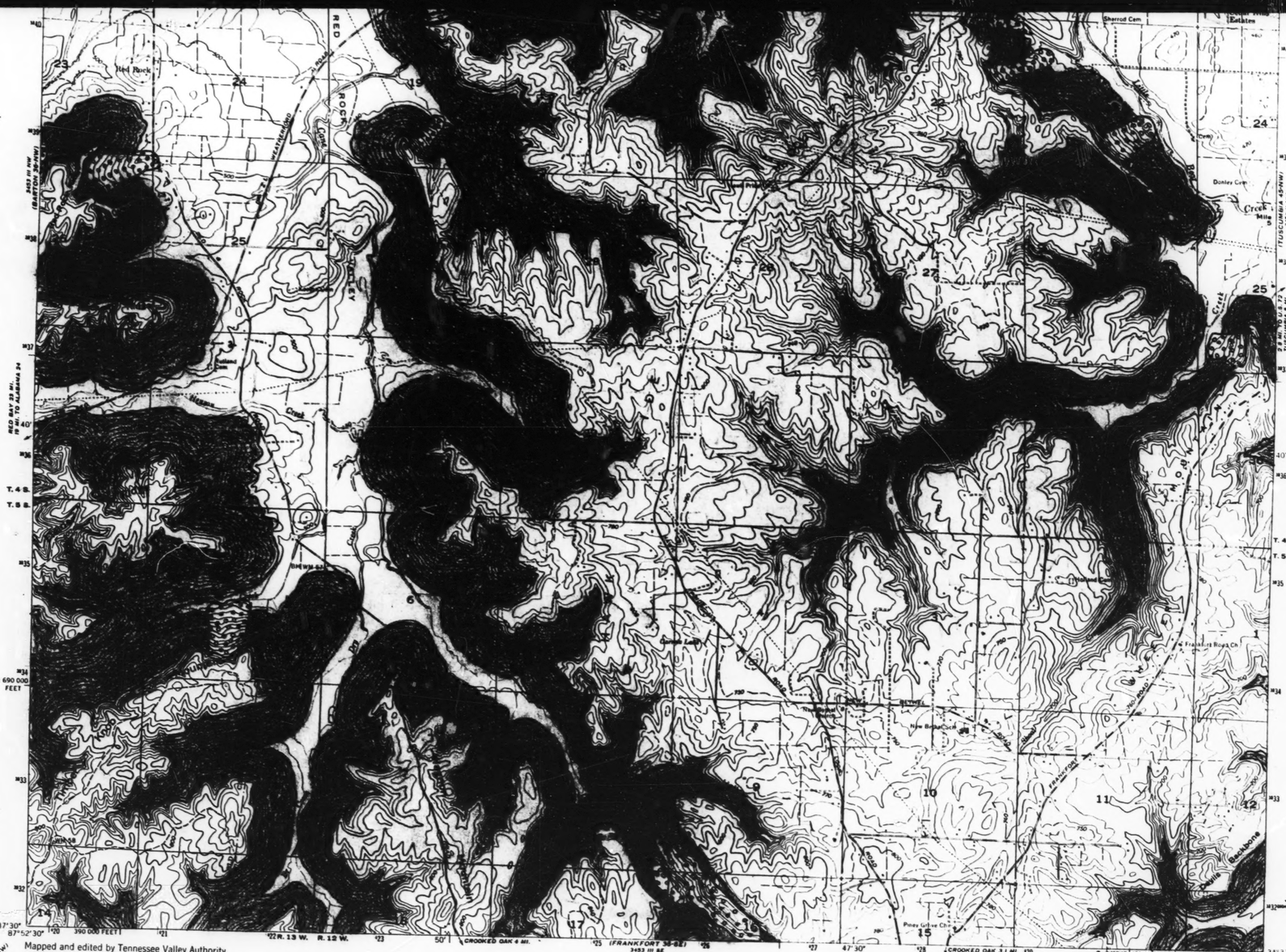

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Revised by TVA in 1968 by photogrammetric methods using aerial photographs taken 1967 and by reference to TVA-USGS quadrangle dated 1954. Map field checked by TVA 1971

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (West) rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks.

SCALE 1:24000

CONTOUR INTERVAL 20 FEET
DASHED LINES REPRESENT HALF-INTERVAL CONTOURS
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Heavy duty — Poor motor road
Medium duty — Wagon and jeep track
Light duty — Foot trail
U. S. Route — State Route

PRIDE, ALA.
N3437.5/W8745/7.5
1971

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/U.S.Geological Survey editorial standards

ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE PRIDE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (F-2)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol & designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

NOTE

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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

- sh — bench with high wall
- sf — furrowed with high wall
- sd — multiple furrows and multiple benches
- ss — hilltop removed
- srg — reclaimed by grading
- sru — reclaimed by secondary use
- sh/r — regraded in part, high wall remains

Coal refuse banks

- r — identified on aerial photographs; not classified in field check
- rb — not burnt nor on fire
- rbb — burnt
- rbd — burning
- rbs — sludge

Quarries

- q — quarry site
- qub — spoil bank, quarry waste

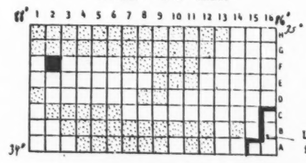
Gravel pits

- g — site of gravel pit

Slides in man-made features

- af — earth flow in fill
- a/s — earth flow in strip castings
- a/r — earth flow in coal refuse

GADSPEN 1° x 2° SHEET



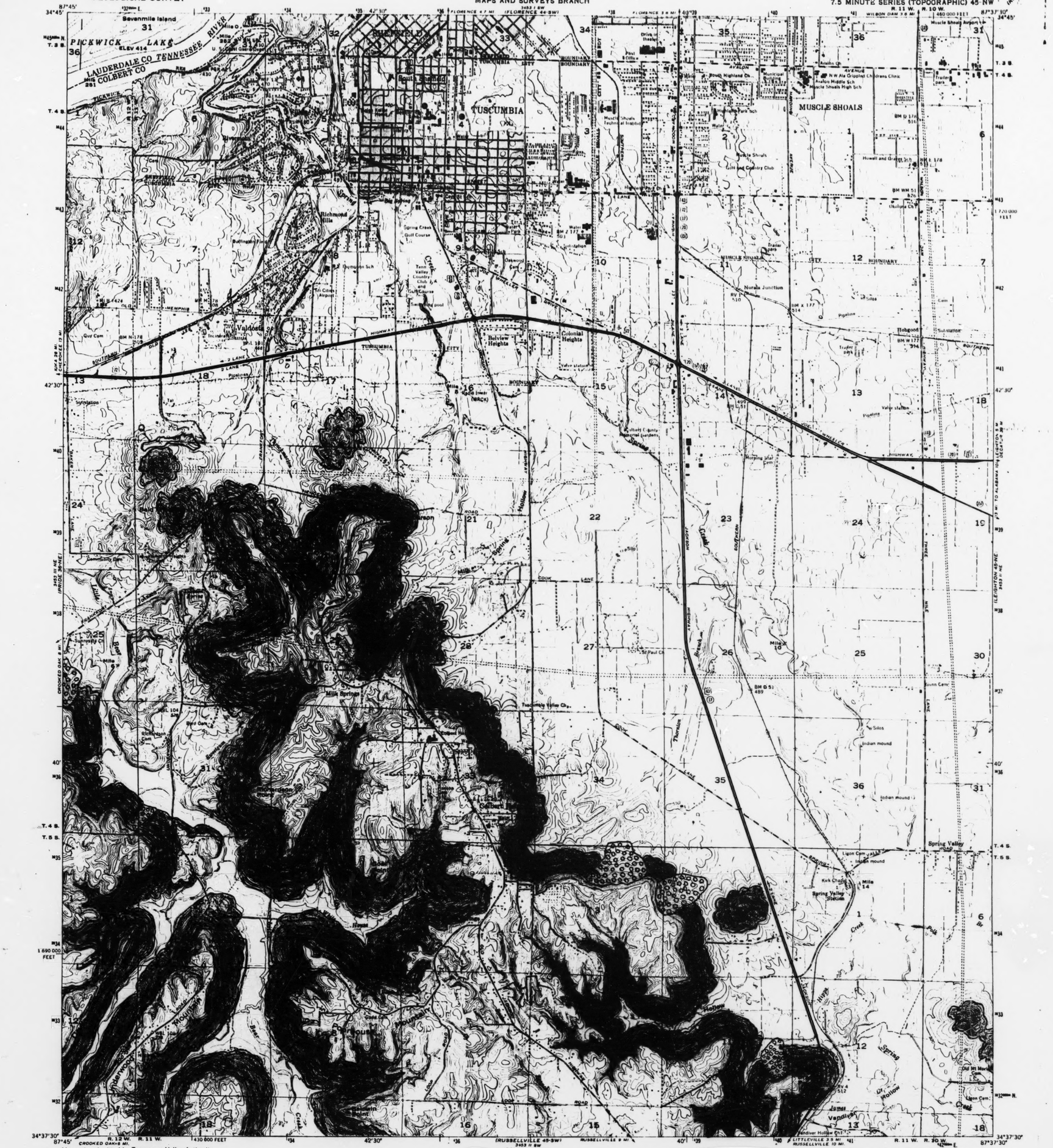
Quadrangle does not contain landslides or related features

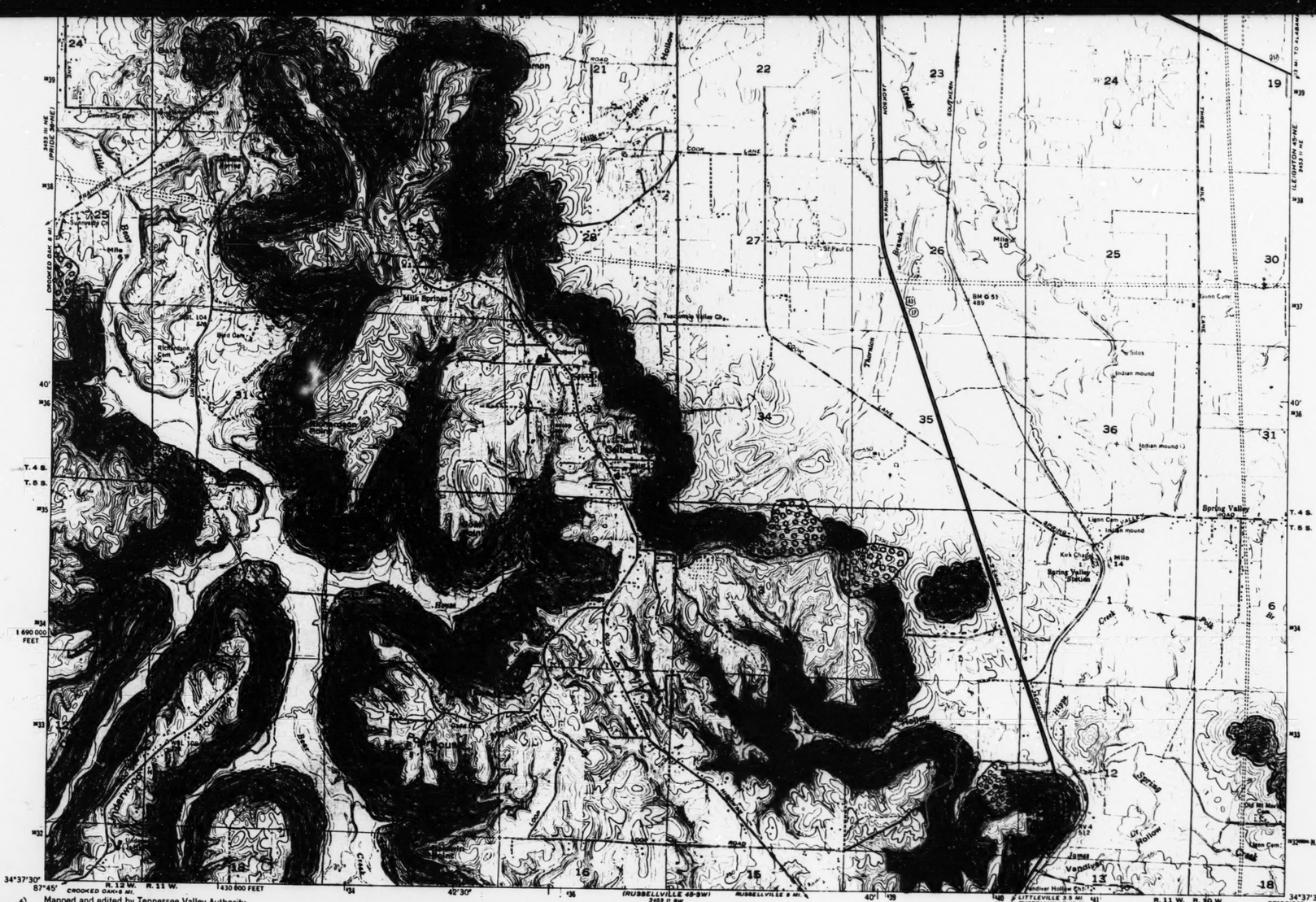
Limit of inventory

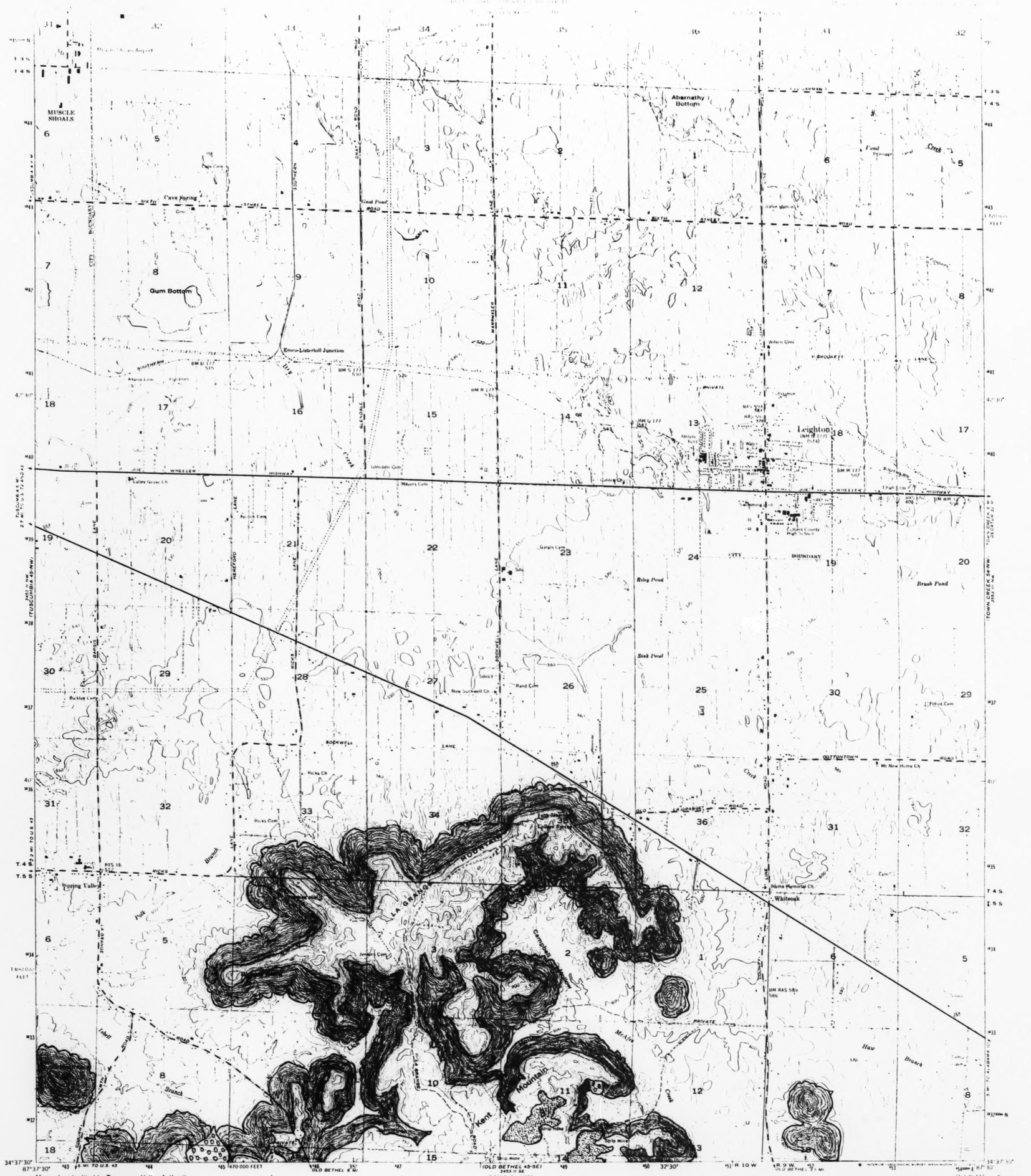
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

TUSCUMBIA QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 45-NW


PICKWICK LAKE
ELEV 414
LAUDERDALE CO TENNESSEE
COLBERT CO
RIVER
Sevenmile Island
TUSCUMBIA
MUSCLE SHOALS
South Highland Dr
Municipal Building
Muscle Shoals Airport
Muscle Shoals Technical Institute
Muscle Shoals Park Sch
Muscle Shoals Golf and Country Club
Howell and Grant Sch
Avalon Middle Sch
Muscle Shoals High Sch
N W Ala Crippled Childrens Clinic
Trailer Park
Oakwood Cem
Richmond Hills
Spring Creek Golf Course
Tri Cities Airport
Valdosta
Bolview Heights
Colonial Heights
Norala Junction
Hobgood
Substation
Tennessee Valley Country Club A and Golf Course
Swimming pool
Pipelines
Valve station
Morgan Spgs Cem
Colbert County Memorial Gardens
Spring
Mill Springs
Tuscumbia Valley Ch
Indian mound
Spring Valley Station
Spring Valley Road
Lyon Cem
Kirk Creek
Mile 14
Old Mt Moriah Cem
James Vandiver
Vandiver Hollow Ch
Sulphur Springs Ch
Sulphur Springs Cem
Sulphur Springs Valley Ch
Sulphur Springs Valley Cem
Mountain
Mountain Rd
Mountain Top Rd
Mountain View Rd
Mountain View Ch
Mountain View Cem
Mountain Springs Ch
Mountain Springs Cem
Mountain Springs Rd
Mountain Springs Valley Rd
Mountain Springs Valley Ch
Mountain Springs Valley Cem


Spring Valley road
Spring Valley Station
Mills Spartan
Indian mound
Lyon Cem.
Kok Chapel
Mile 14
Mile 15
Mile 16
Mile 18
Old Mt Moriah
Vandiver
Silver Hollow Ch.
Rockhouse
Thornton
Lyon Creek
Lick Creek
Spring Creek
Lick Hollow
Rockhouse Creek
Lower Hollow
Sparks
Fairground
Lyon Cem.
Tuscumbia Valley Ch.
St Paul Ch.
Cook Lane
Fairground Lane
Rockhouse Lane
Spring Valley Lane
Lyon Cem. Lane
Mills Spartan Lane
Old Mt Moriah Lane
Vandiver Lane
Silver Hollow Ch. Lane
Rockhouse Road
Spring Valley road
Old Mt Moriah road
Lyon Cem. road
Silver Hollow Ch. road
Vandiver road
Fairground road
Mills Spartan road
Cook road
Rockhouse



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Revised by TVA in 1968 by photogrammetric methods using aerial photographs taken 1967 and by reference to TVA-USGS quadrangle dated 1952. Map field checked by TVA 1971

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (West) rectangular coordinate system
1000-meter Universal Transverse Mercator grid ticks

SCALE 1:24000

CONTOUR INTERVAL 10 FEET
DASHED LINES REPRESENT HALF INTERVAL CONTOURS
DATUM IS MEAN SEA LEVEL

ROAD CLASSIFICATION

Heavy duty	Poor motor road
Medium duty	Wagon and jeep track
Light duty	Foot trail
U. S. Route	State Route

In developed areas, only through roads are classified.

LEIGHTON, ALA.

1971

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981

This map is preliminary and has not

LANDSLIDES AND RELATED FEATURES

OF THE LEIGHTON, ALA. QUADRANGLE

NOTE

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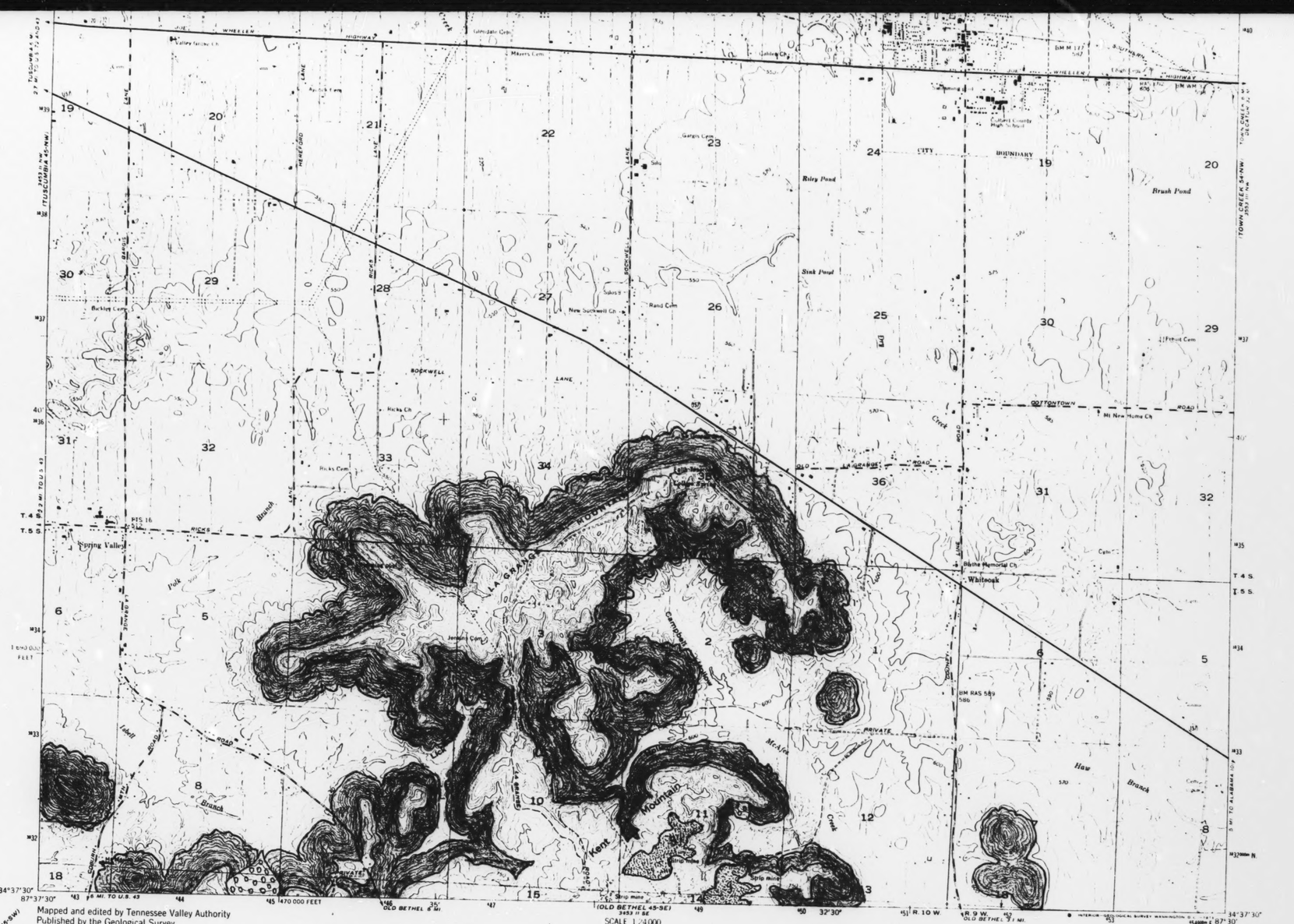
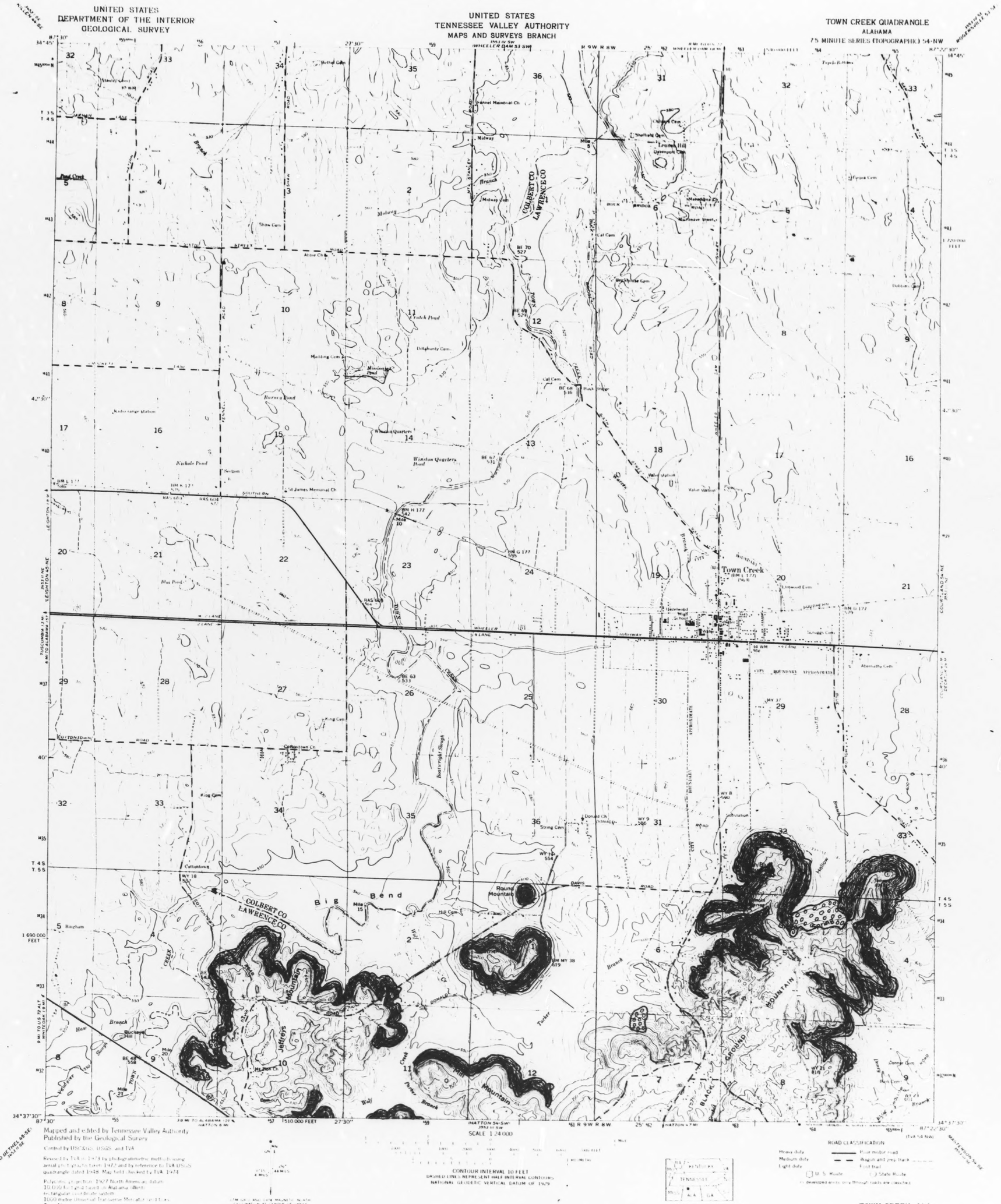

LA GRANGE MOUNTAIN
Kent Mountain
Riley Pond
Brush Pond
Sink Pond
Spring Valley
Whitesok
Haw Branch
Kent
Strip mine
Strip mine
Riley Cem
Rand Cem
Ricks Cem
Jenkins Cem
Bethel Cem
Bickley Cem
Mt New Home Ch
Bethel Ch
Whitesok Ch
Mt Pleasant Ch
Beene Memorial Ch
Fitzpatrick Cem
Fitzpatrick Ch
Valley Grove Ch
Mayers Cem
Gaines Cem
New Rockwell Ch
Pitts Cem
Jenkins Cem
Bethel Cem
Mt New Home Cem
Beene Memorial Cem
Whitesok Cem
Haw Branch Cem
Bethel Ch
Mt Pleasant Ch
Valley Grove Ch
Fitzpatrick Ch
Fitzpatrick Cem
Mt New Home Ch
Beene Memorial Ch
Whitesok Ch

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

TOWN CREEK QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC) 54-NW



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USCGS, USGS, and TVA

Revised by TVA in 1978 by photogrammetric methods using aerial photographs flown 1972 and by reference to TVA-USGS Quadrangle dated 1948. Map field checked by TVA 1978

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama coordinate system, west zone
1000-metre Universal Transverse Mercator grid ticks, Zone 16

TOWN CREEK, ALA.
N3437.5/W8722.5/7.5
1974

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not beeg reviewed for conformity w/U.S Geological Survey editorial

LANDSLIDES AND RELATED FEATURES

OF THE TOWN CREEK, ALA. QUADRANGLE

by

John S. Pomeroy

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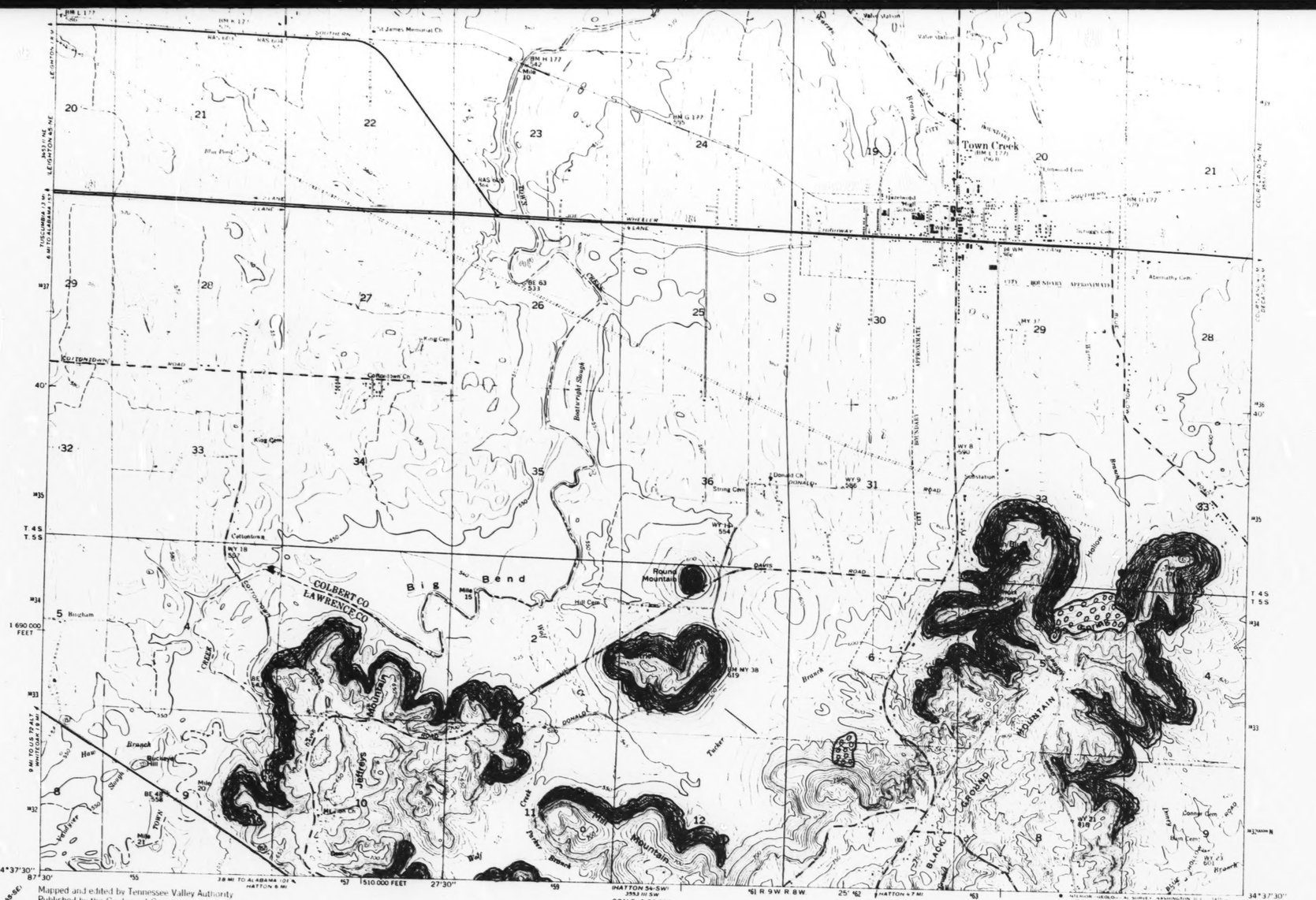

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Revised by TVA in 1973 by photogrammetric methods using aerial photographs taken 1972 and by reference to TVA USGS quadrangle dated 1948. Map field checked by TVA 1974

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (West)
rectangular coordinate system
1000 metre Universal Transverse Mercator Grid ticks
Zone 16

TOWN CREEK, ALA.
N3437.5/W8722.5/7.5
1974

LANDSLIDES AND RELATED FEATURES

OF THE TOWN CREEK, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (F-5)

Landslides and related features interpreted from aerial photographs:

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1:40,000 (black and white) 1978

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Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

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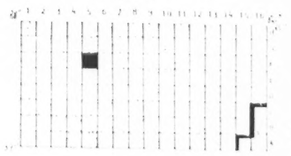

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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

sh	bench with high wall
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sd	multiple furrows and multiple benches
ss	hilltop removed
srg	reclaimed by grading
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sh/r	regraded in part, high wall remains

Coal refuse banks

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qub	spoil bank, quarry waste

Gravel pits

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Slides in man-made features

af	earth flow in fill
a/s	earth flow in strip castings
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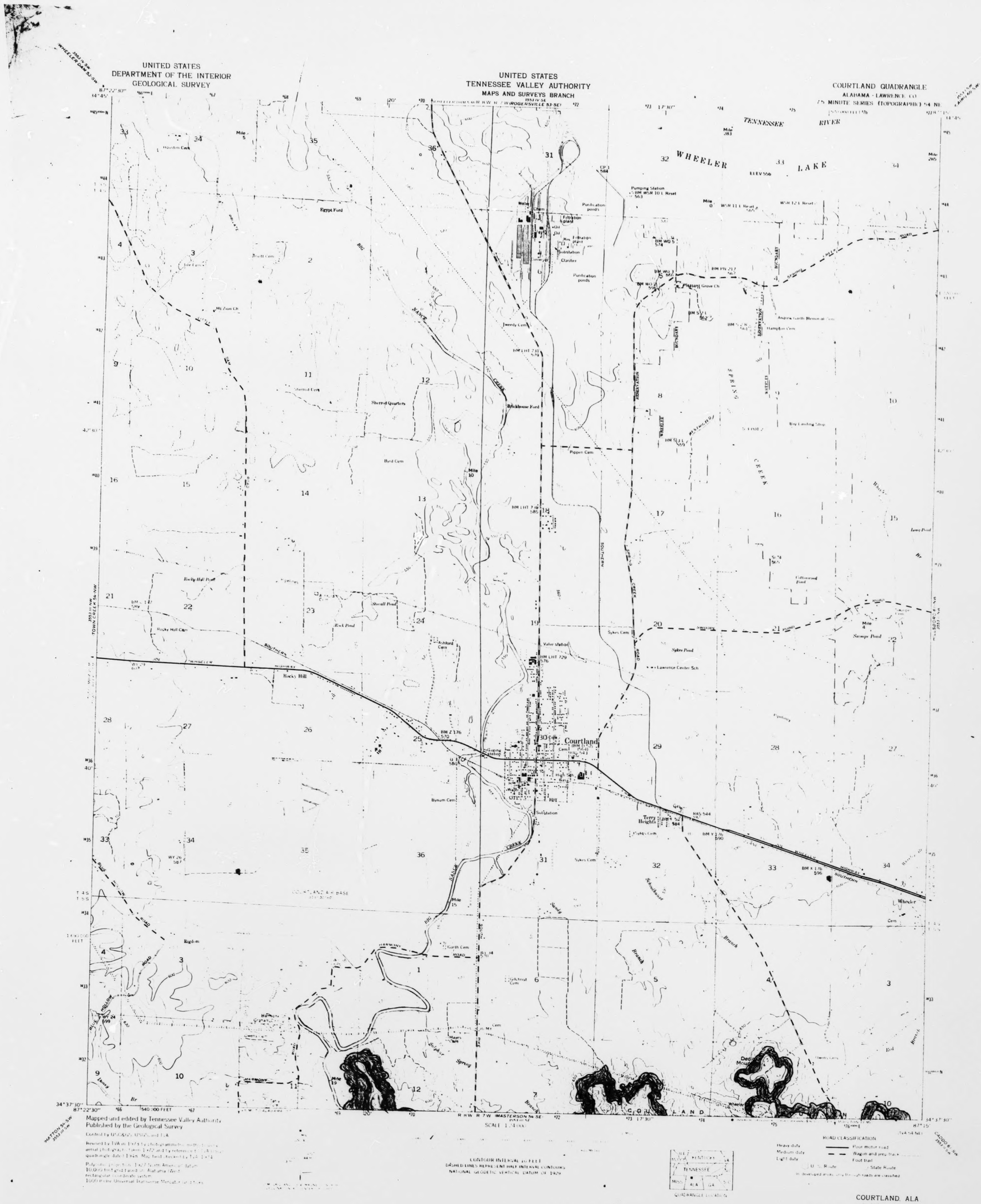
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

COURTLAND QUADRANGLE
ALABAMA - LAWRENCE CO
7.5 MINUTE SERIES (TOPOGRAPHIC) 34 NE



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Controlled by USGS/USC and GA

Revised by TVA in 1975 by photogrammetric methods from aerial photographs taken 1972 and by reference to USGS quadrangle dated 1948. Map field checked by TVA 1974

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama coordinate system, west zone
1000-meter Universal Transverse Mercator grid ticks

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
DASHED LINES REPRESENT HALF INTERVAL CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION

Heavy duty	Four motor road
Medium duty	Wagon and jeep trail
Light duty	Foot trail
U. S. Route	State Route

In forested areas, only roads are classified

QUADRANGLE LOCATION

COURTLAND, ALA.
N3437.5-W8715/7.5
1974

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1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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LANDSLIDES AND RELATED FEATURES

OF THE COURTLAND, ALA. QUADRANGLE

by

John S. Pomeroy

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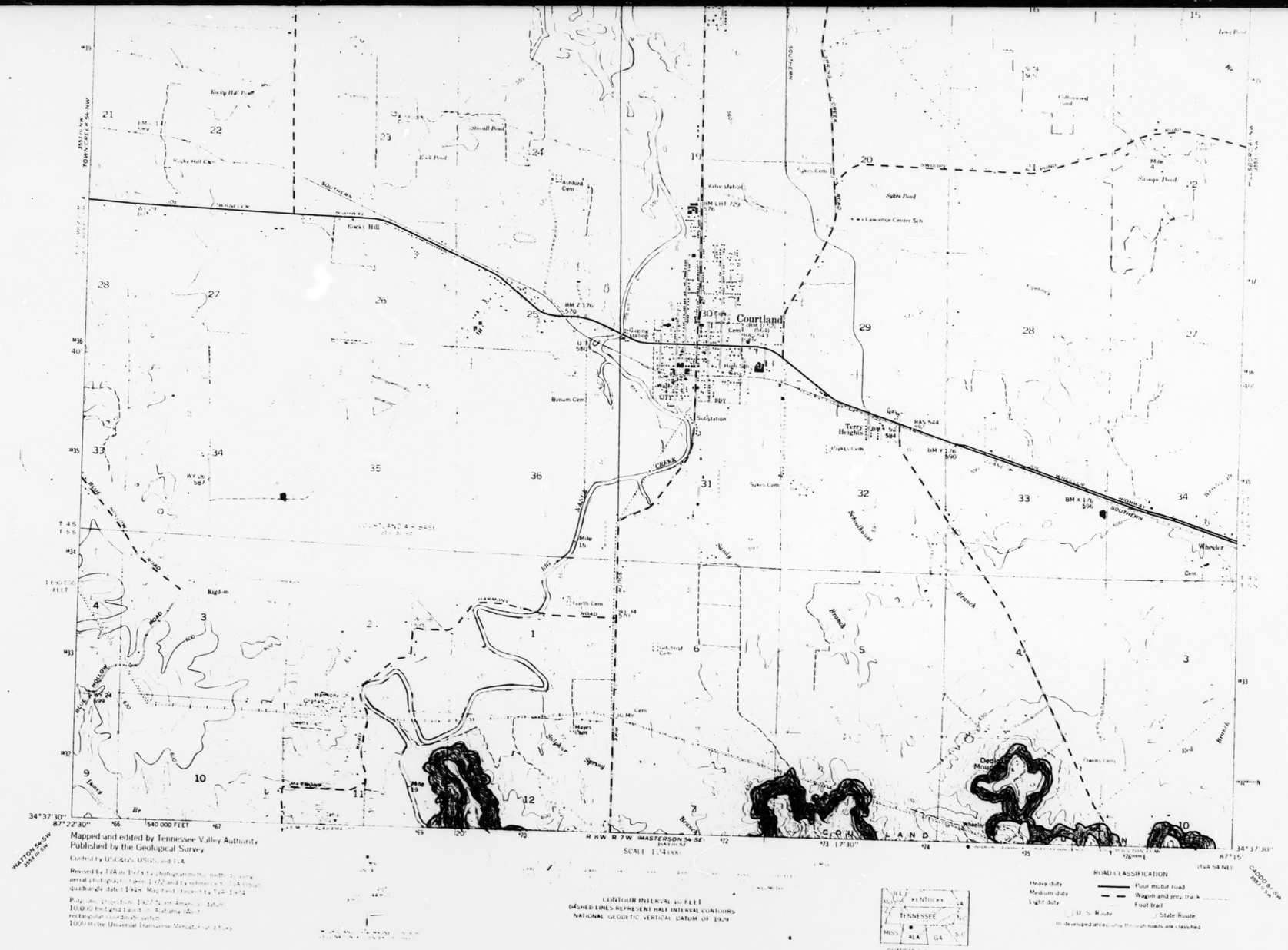

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LANDSLIDES AND RELATED FEATURES

OF THE COURTLAND, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (F-6)

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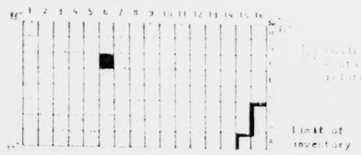

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- ss — hilltop removed
- srg — reclaimed by grading
- sru — reclaimed by secondary use
- sh/r — regraded in part, high wall remains

Coal refuse banks

- r — identified on aerial photographs; not classified in field check
- rb — not burnt nor on fire
- rbb — burnt
- rbd — burning
- rbs — sludge

Quarries

- q — quarry site
- qub — spoil bank, quarry waste

Gravel pits

- g — site of gravel pit

Slides in man-made features

- af — earth flow in fill
- a/s — earth flow in strip castings
- a/r — earth flow in coal refuse

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

HUNTSVILLE QUADRANGLE
ALABAMA-MADISON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

Mapped and edited by the Tennessee Valley Authority
Published by the Geological Survey

HUNTSVILLE, ALA.
1975

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981

LANDSLIDES AND RELATED FEATURES

OF THE HUNTSVILLE, ALA. QUADRANGLE

by

NOTE

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Landslides and related features interpreted from aerial photographs:

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1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/U.S.Geological Survey standards

ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE HUNTSVILLE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (F-12)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)
- sh bench with high wall
- sf furrowed with high wall
- sd multiple furrows and multiple benches
- ss hilltop removed
- srg reclaimed by grading
- sru reclaimed by secondary use
- sh/r regraded in part, high wall remains

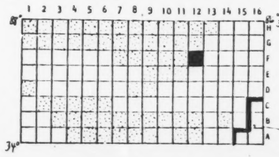
Coal refuse banks
- r identified on aerial photographs; not classified in field check
- rb not burnt nor on fire
- rbb burnt
- rbd burning
- rbs sludge

Quarries
- q quarry site
- qub spoil bank, quarry waste

Gravel pits
- g site of gravel pit

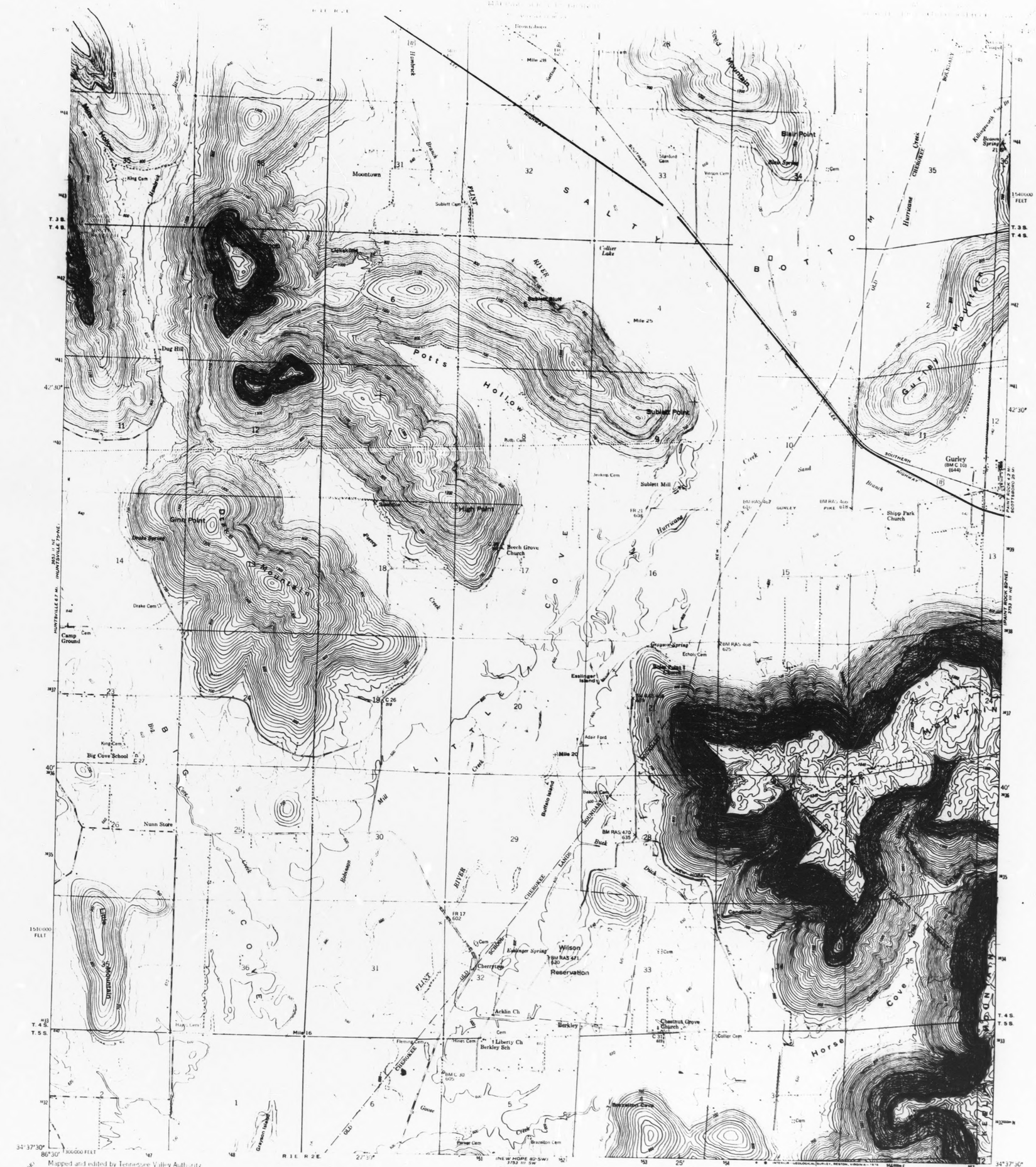
Slides in man-made features
- af earth flow in fill
- a/s earth flow in strip castings
- a/r earth flow in coal refuse

GADSDEN 1° x 2° SHEET



Quadrangle does not contain landslides or related features

Limit of inventory



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS/NOAA, CE, USGS, and TVA

Topography by USGS and TVA by photogrammetric and planimetric methods using aerial photographs taken 1948.
Map field checked by TVA, 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) rectangular coordinate system
1000 metre Universal Transverse Mercator grid ticks, Zone 16, shown in blue

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981

LANDSLIDES AND RELATED FEATURES

OF THE MOONTOWN, ALA. QUADRANGLE

NOTE

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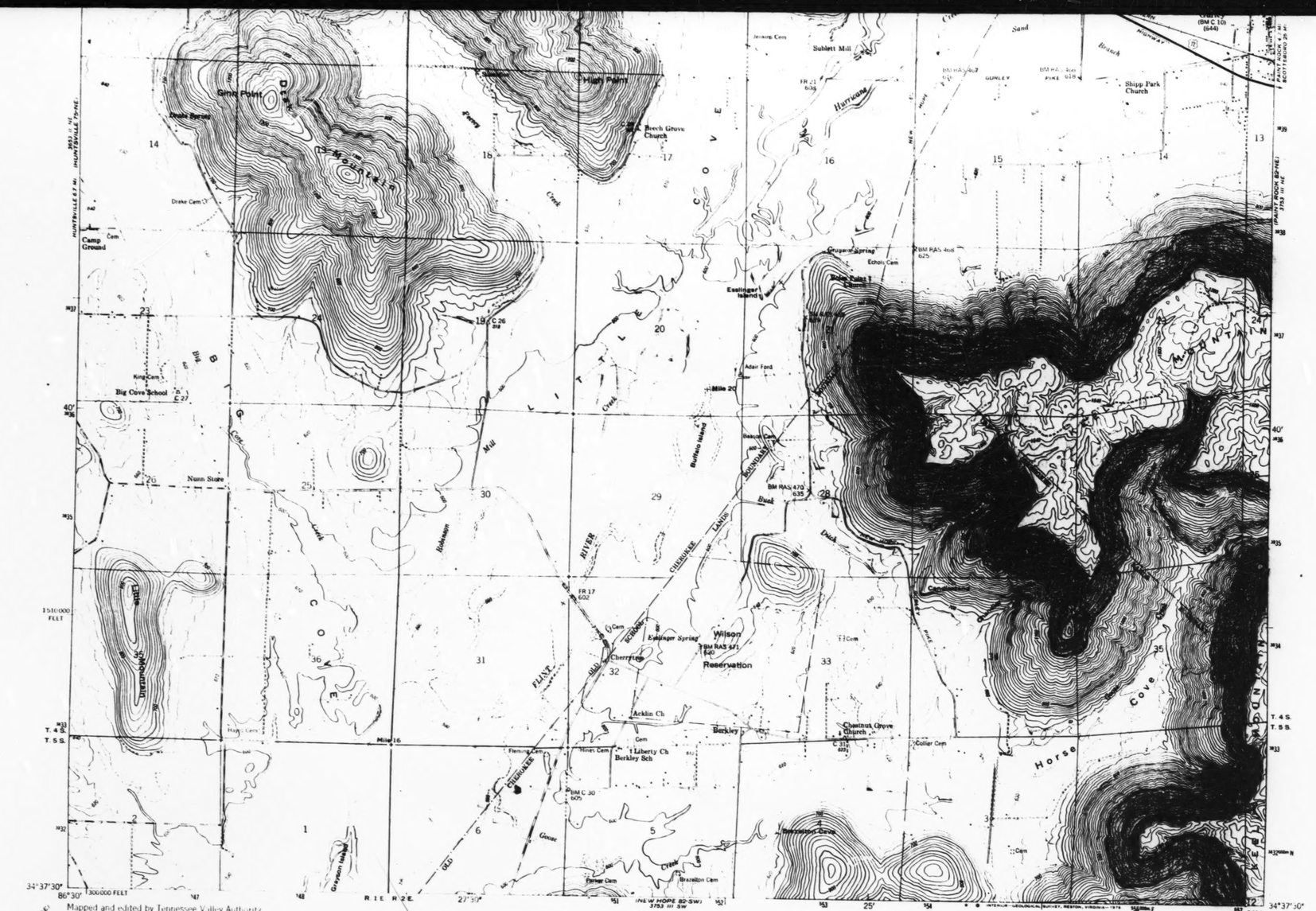

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
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Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial standards

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LANDSLIDES AND RELATED FEATURES

OF THE MOONTOWN, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (F-13)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
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- rbd burning
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- g site of gravel pit

Slides in man-made features
- af earth flow in fill
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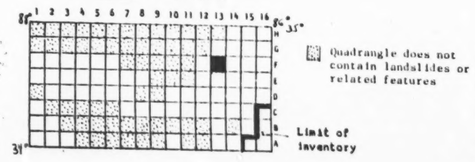
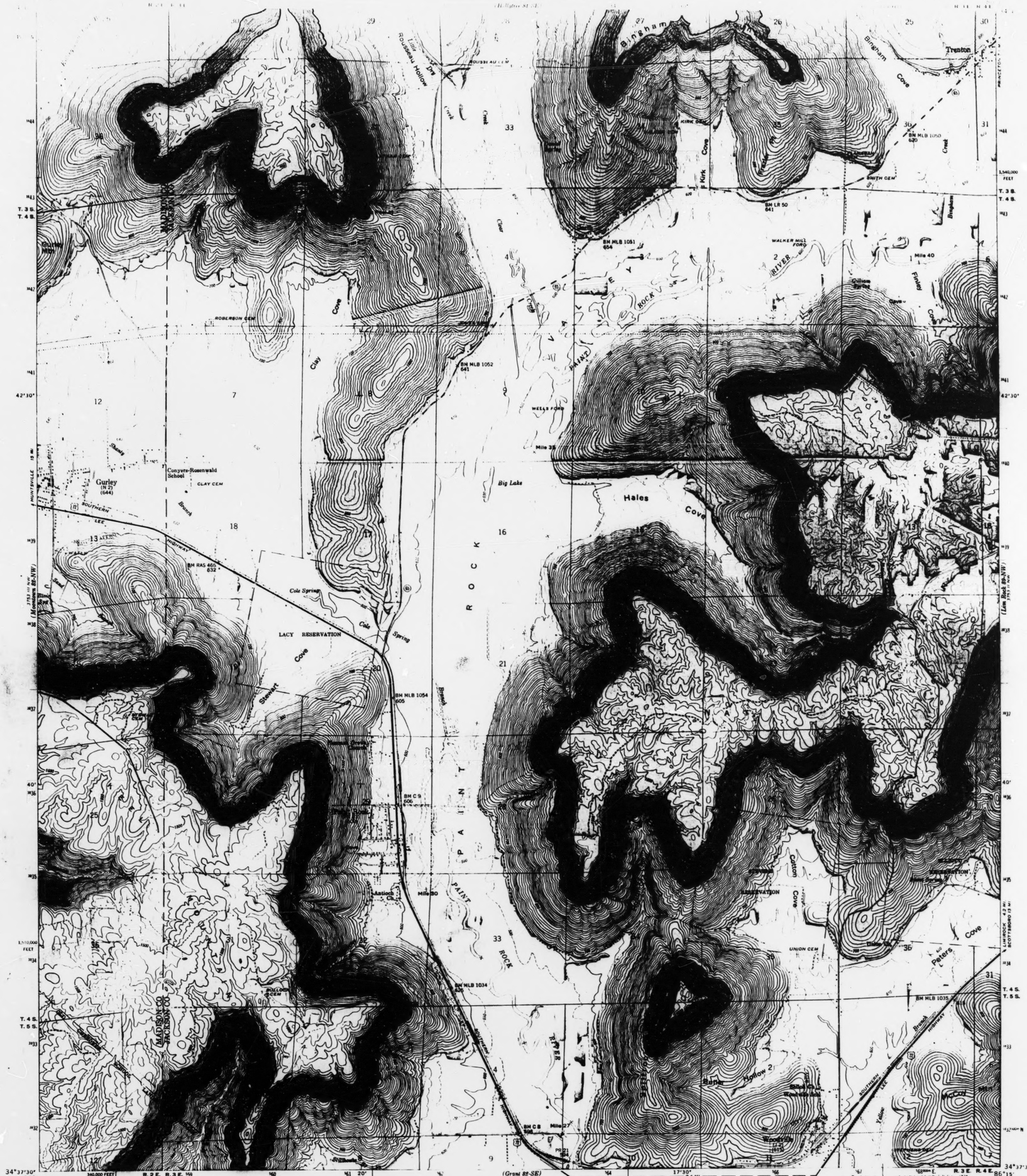
GADSPEN 1° x 2° SHEET





Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Basic control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric and planetable methods using aerial photographs.
Map field checked by TVA, 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks
Zone 1e, shown in blue

PAINT ROCK, ALA.
N3433/5-W8615/7.5
1948

LANDSLIDES AND RELATED FEATURES

OF THE PAINT ROCK, ALA. QUADRANGLE

by

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/U.SGeological Survey

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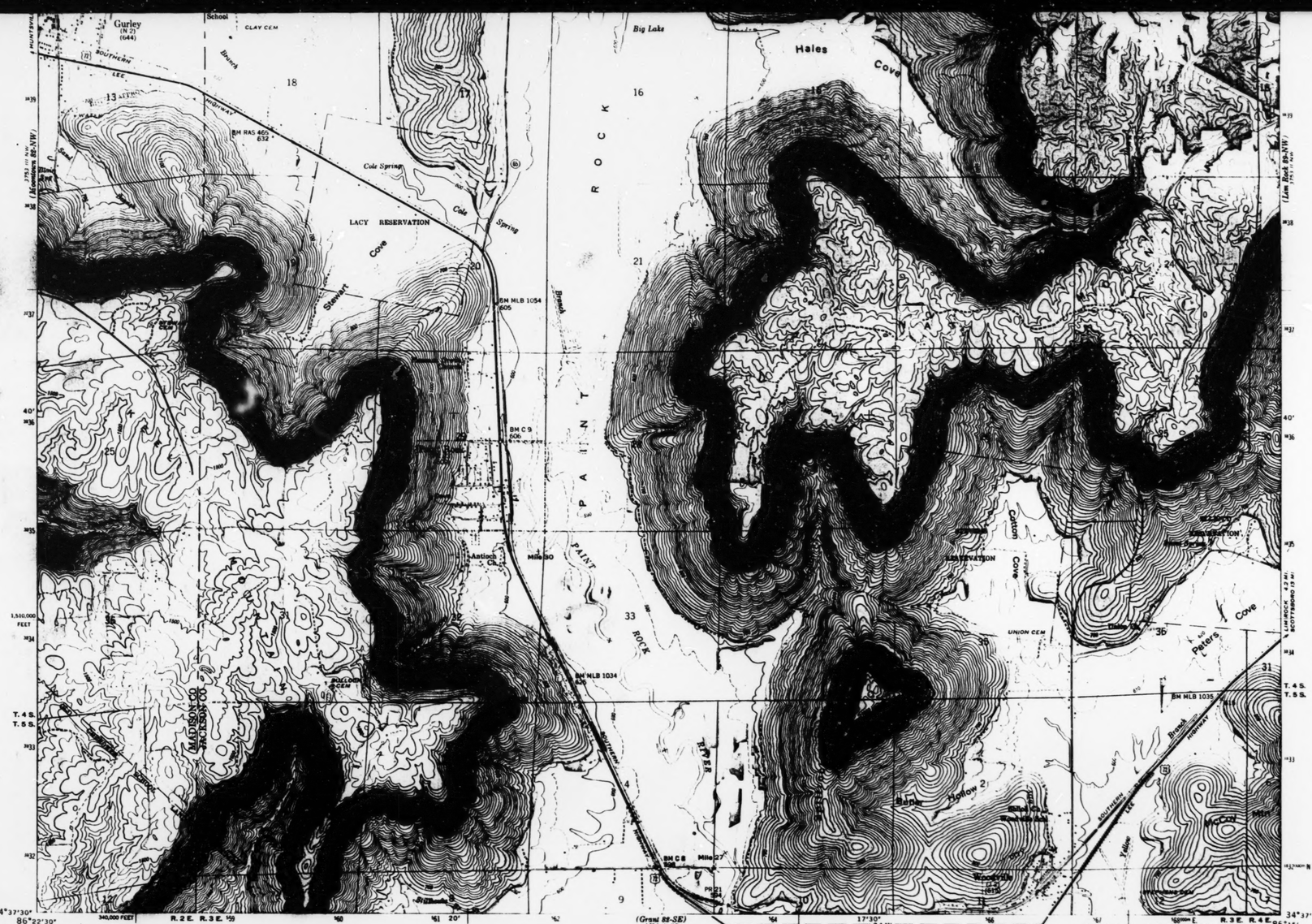

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Basic control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric and planetable methods using aerial photographs.
Map field checked by TVA, 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East)
rectangular coordinate system
1000 metre Universal Transverse Mercator Grid ticks
Zone 16, shown in blue

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT HALF INTERVAL CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Heavy duty	Poor motor road
Medium duty	Wagon and jeep track
Light duty	Foot trail
U.S. Route	State Route

PAINT ROCK, ALA.
N3437.5/W8615/7.5
1948

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LANDSLIDES AND RELATED FEATURES

OF THE PAINT ROCK, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (F-19)

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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

sh	bench with high wall
sf	furrowed with high wall
sd	multiple furrows and multiple benches
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Coal refuse banks

r	identified on aerial photographs; not classified in field check
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rbb	burnt
rbd	burning
rbs	sludge

Quarries

q	quarry site
qub	spoil bank, quarry waste

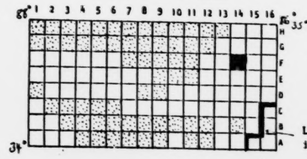
Gravel pits

g	site of gravel pit

Slides in man-made features

af	earth flow in fill
a/s	earth flow in strip castings
a/r	earth flow in coal refuse

GADSDEN 1° x 2° SHEET



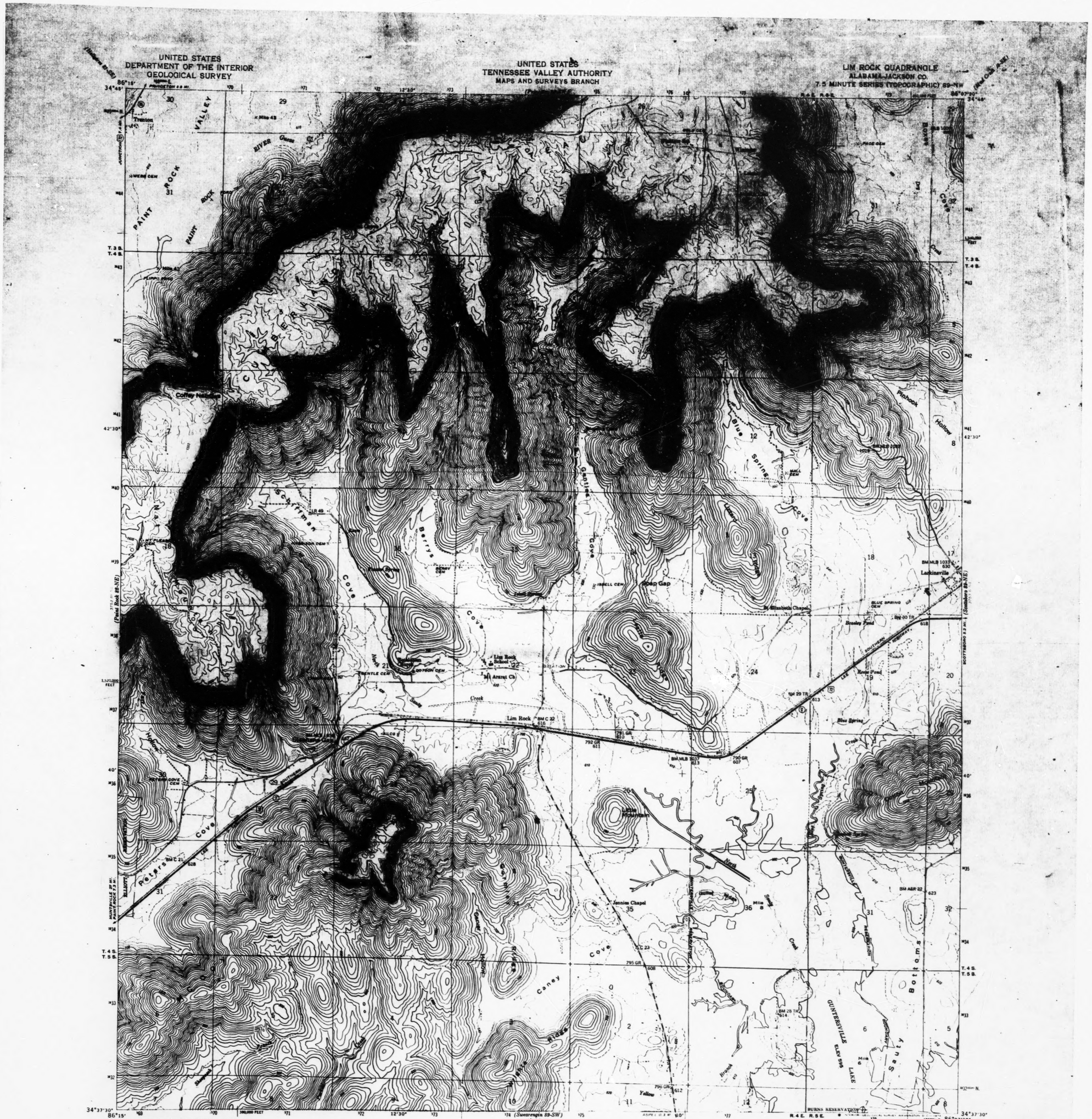
Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH

LIM ROCK QUADRANGLE
ALABAMA-JACKSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC) 89-NW



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods
Map field checked by TVA, 1947

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama (East)
rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks,
Zone 16, shown in blue

SCALE 1:24000

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

ROAD CLASSIFICATION

Heavy-duty	Poor motor road
Medium-duty	Wagon and jeep track
Light-duty	Foot trail
U. S. Route	State Route

In developed areas, only through roads are classified

QUADRANGLE LOCATION

LIM ROCK, ALA.
N3437.5—W8607.5/7.5
1947
PHOTOREVISED 1978
AMS 5755 II NW-SERIES V844

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1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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LANDSLIDES AND RELATED FEATURES

OF THE LIM ROCK, ALA. QUADRANGLE

by

John S. Pomeroy

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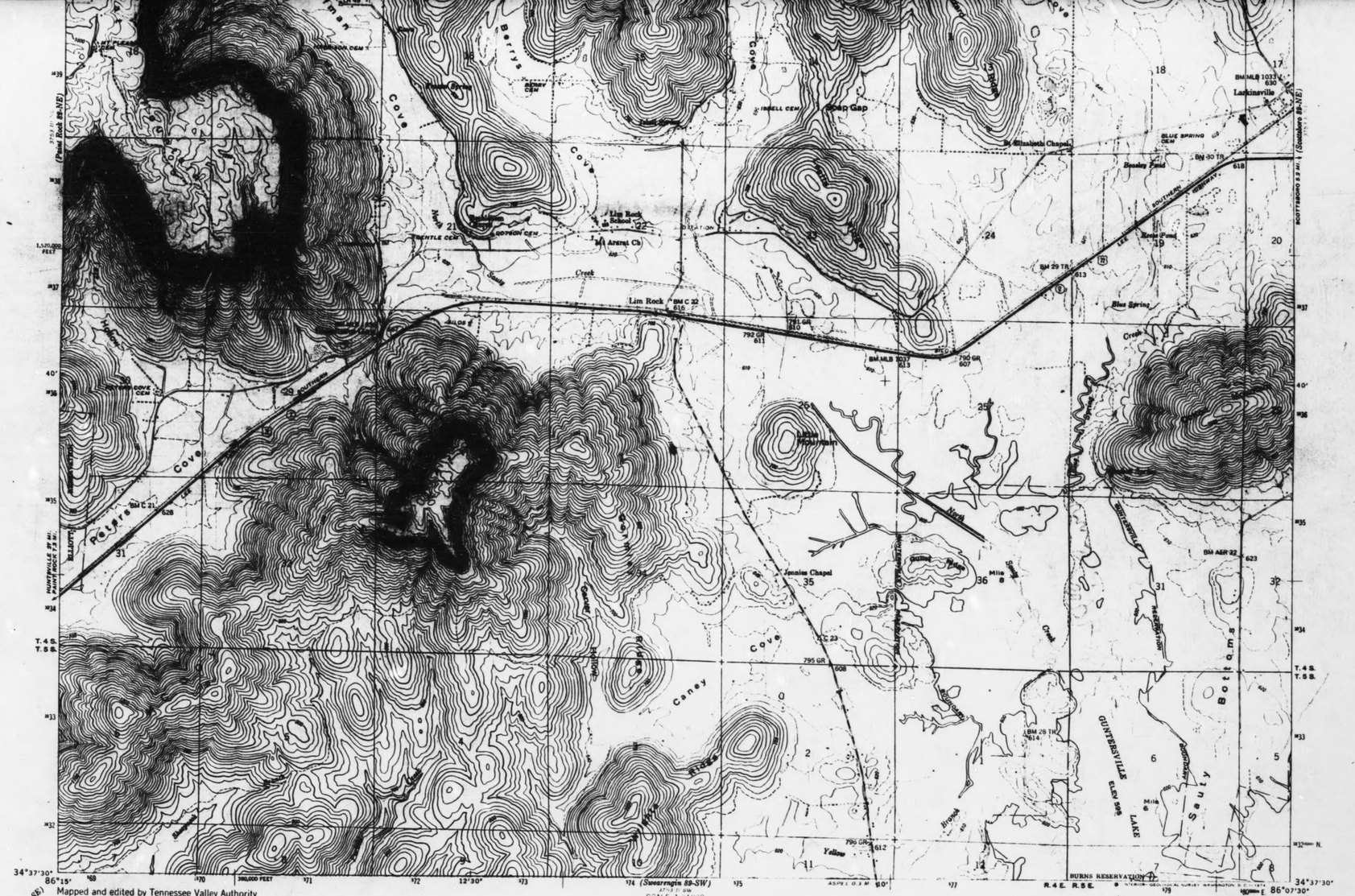

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rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks,
Zone 16, shown in blue

UTM GRID AND 1973 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

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LANDSLIDES AND RELATED FEATURES

OF THE LIM ROCK, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (F-15)

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g	site of gravel pit

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af	earth flow in fill
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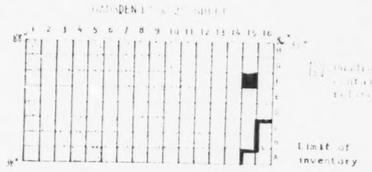
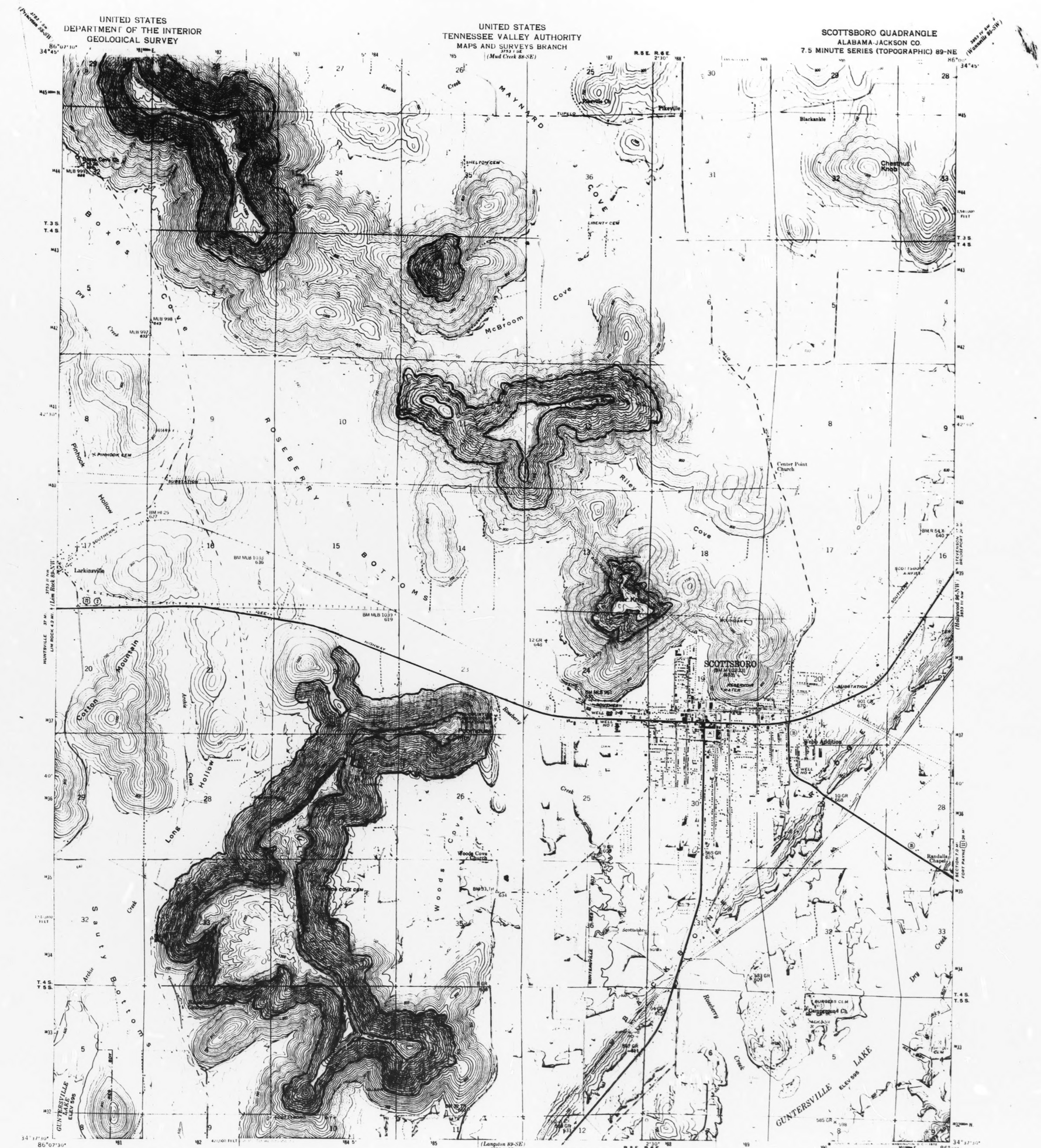
INCIDENT... 2° SPOIL





Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/U.S.Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE SCOTTSBORO, ALA. QUADRANGLE

by

John S. Pomeroy

1982

NOTE

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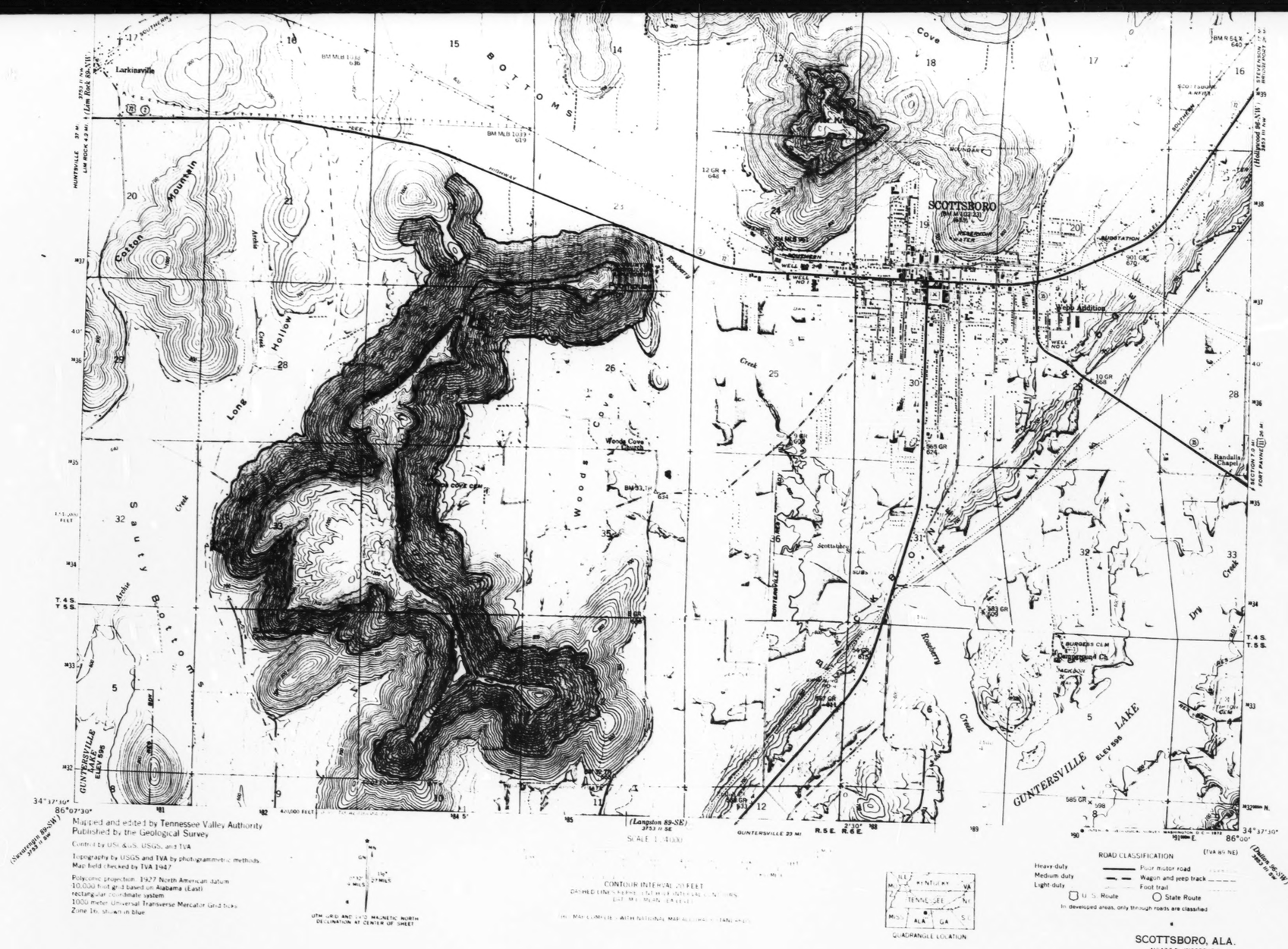

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods
Map field checked by TVA 1947

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) rectangular coordinate system
1000 meter Universal Transverse Mercator Grid ticks
Zone 16, shown in blue

UTM GRID AND 1972 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

CONTOUR INTERVAL 20 FEET
DASHED LINES REPRESENT SUPPLEMENTARY CONTOURS
EST. MEAN SEA LEVEL

TO OBTAIN COMPARABLE WITH NATIONAL MAP ACCURACY STANDARDS

QUADRANGLE LOCATION

ROAD CLASSIFICATION (TVA 85 NE)

Heavy duty — Four motor road
Medium duty — Wagon and jeep track
Light duty — Foot trail
U. S. Route — State Route

In developed areas, only through roads are classified

SCOTTSBORO, ALA.
N3437.5—W8600.7.5
1947

AMS 3753 II NE-SERIES V844

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE SCOTTSBORO, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (F-/6)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes areas where landslides are quarries.

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

NOTE

Information shown is intended as a general guide to ground conditions as of the date of field check. Additional landslides and rockfalls should be anticipated in all map units. The map unit depicts the dominant condition in the area delineated and variations in slope stability may occur at any point in the unit. This map is suitable for general planning purposes and as a supplement to more detailed studies for site selection. The map cannot be used as a substitute for detailed geologic and engineering investigations to establish design and construction criteria of specific sites. Some symbols may not appear on this map because the description is applicable to a series of maps.

MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

- sb — bench with high wall
- sf — furrowed with high wall
- sd — multiple furrows and multiple benches
- ss — hilltop removed
- srg — reclaimed by grading
- sru — reclaimed by secondary use
- sh/r — regraded in part, high wall remains

Coal refuse banks

- r — identified on aerial photographs; not classified in field check
- rb — not burnt nor on fire
- rbb — burnt
- rbd — burning
- rbs — sludge

Quarries

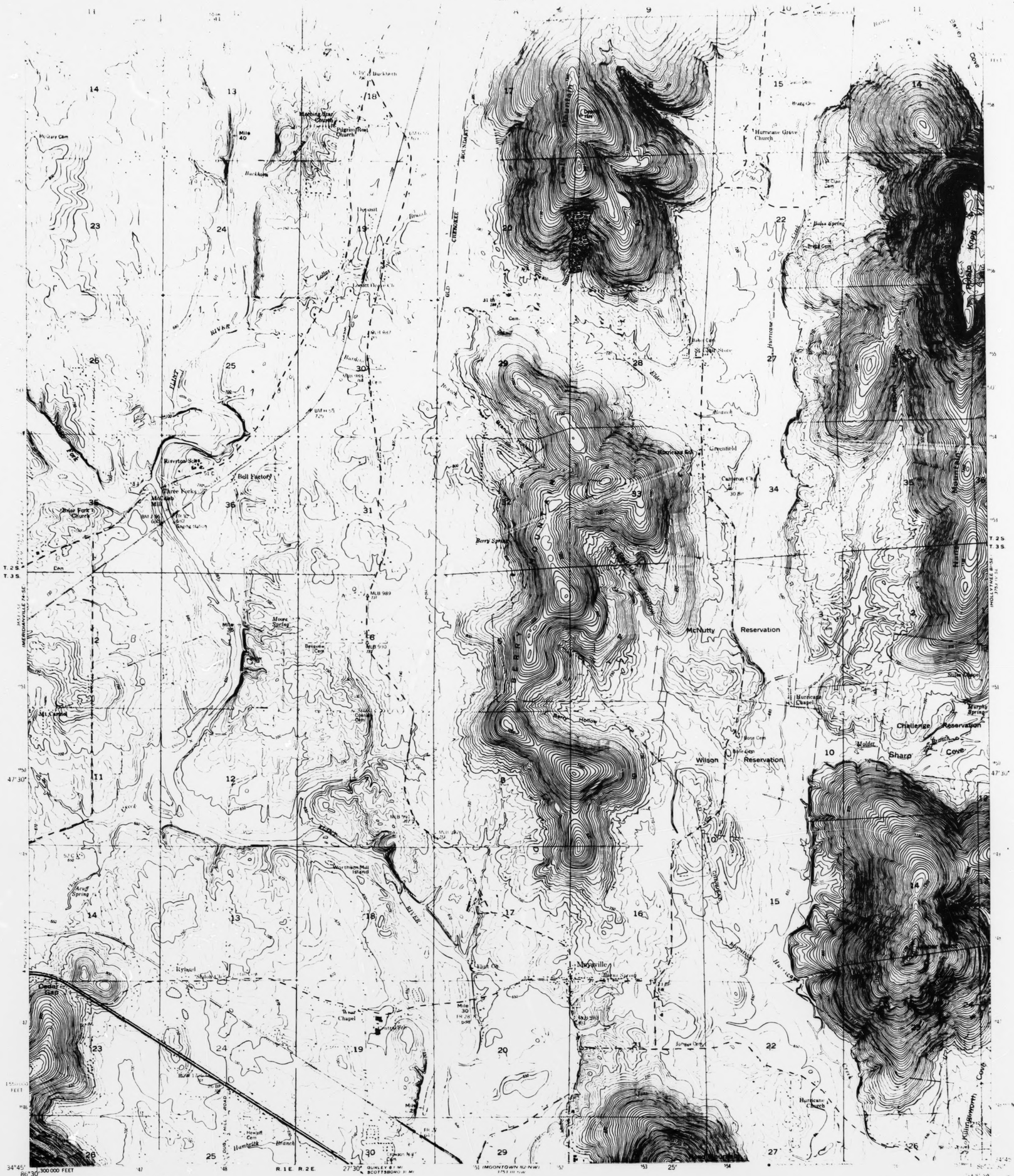
- q — quarry site
- qub — spoil bank, quarry waste

Gravel pits

- g — site of gravel pit

Slides in man-made features

- af — earth flow in fill
- a/s — earth flow in strip castings
- a/r — earth flow in coal refuse


Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey
Control by USC&GS, USGS, CE, and TVA
Topography by USGS and TVA by photogrammetric and planetable methods using aerial photographs taken 1945, 46.
Map field checked by TVA, 1945
Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) rectangular coordinate system
1000 meter Universal Transverse Mercator grid, Zone 16, shown in blue
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 FEET
R.1E. R.2E.
MAYSVILLE ALA.
Landslides and related features interpreted from aerial photographs:
1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978
Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w Geological Survey editorial
LANDSLIDES AND RELATED FEATURES
OF THE MAYSVILLE, ALA QUADRANGLE
by
John S. Pomeroy
NOTE
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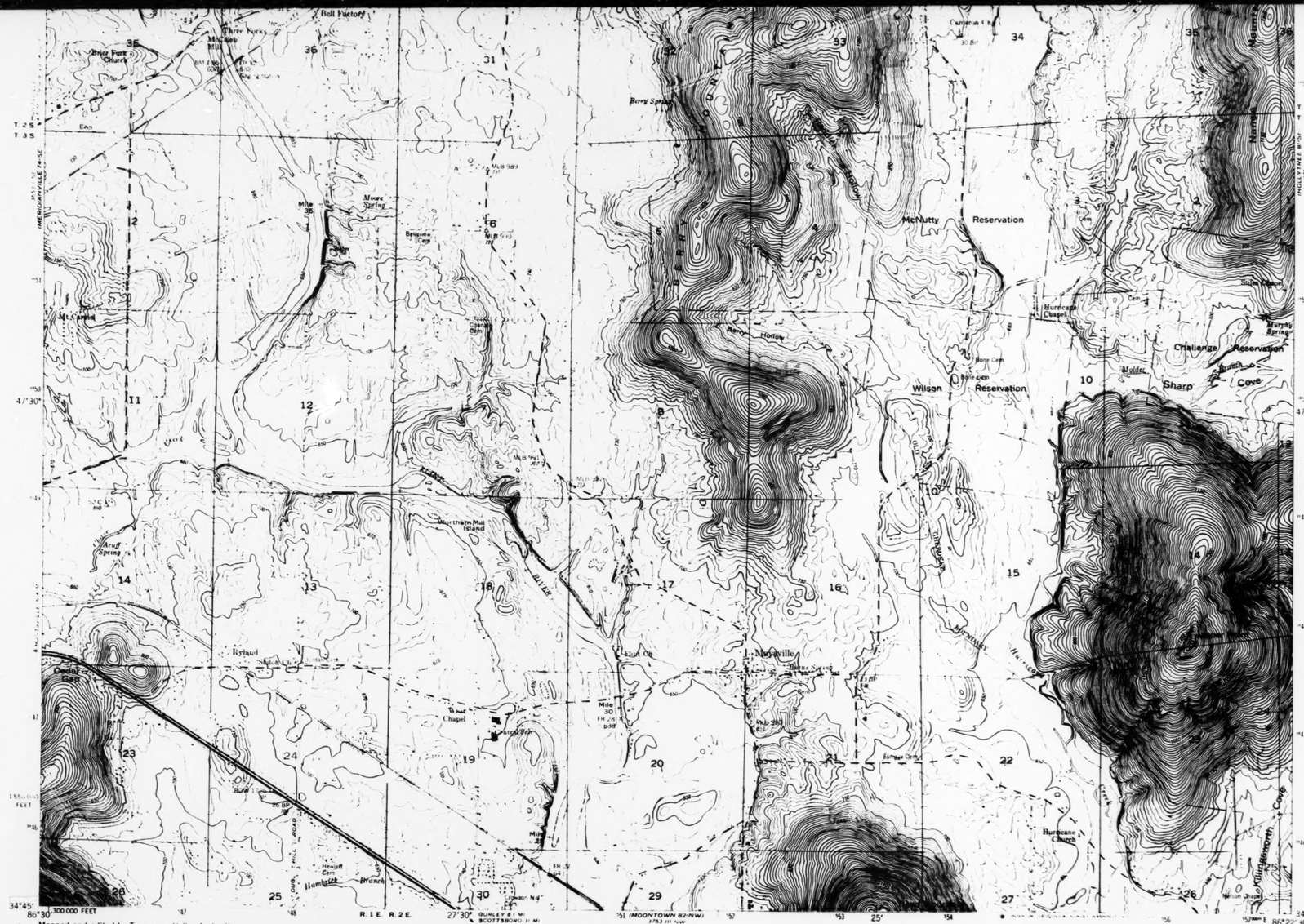

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, CE, and TVA

Topography by USGS and TVA by photogrammetric and planetable methods using aerial photographs taken 1945-46.
Map field checked by TVA, 1948

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama (East) rectangular coordinate system
1000-metre Universal Transverse Mercator grid, Zone 16, shown in blue

ROAD CLASSIFICATION

Heavy duty — Four motor roads
Medium duty — Wagon and jeep trails
Light duty — Foot trail
U.S. Route — State Route

MAYSVILLE, ALA.
N3445-W8622.5/7.5
1948

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity with Geological Survey editorial standards [redacted]

ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE MAYSVILLE, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (G-13)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol & designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

NOTE

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MAN-MADE FEATURES

Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)

- sh — bench with high wall
- sf — furrowed with high wall
- sd — multiple furrows and multiple benches
- ss — hilltop removed
- srg — reclaimed by grading
- sru — reclaimed by secondary use
- sh/r — regraded in part, high wall remains

Coal refuse banks

- r — identified on aerial photographs; not classified in field check
- rb — not burnt nor on fire
- rbb — burnt
- rbd — burning
- rbs — sludge

Quarries

- q — quarry site
- qub — spoil bank, quarry waste

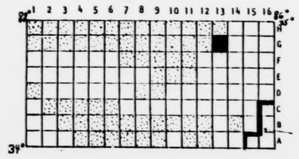
Gravel pits

- g — site of gravel pit

Slides in man-made features

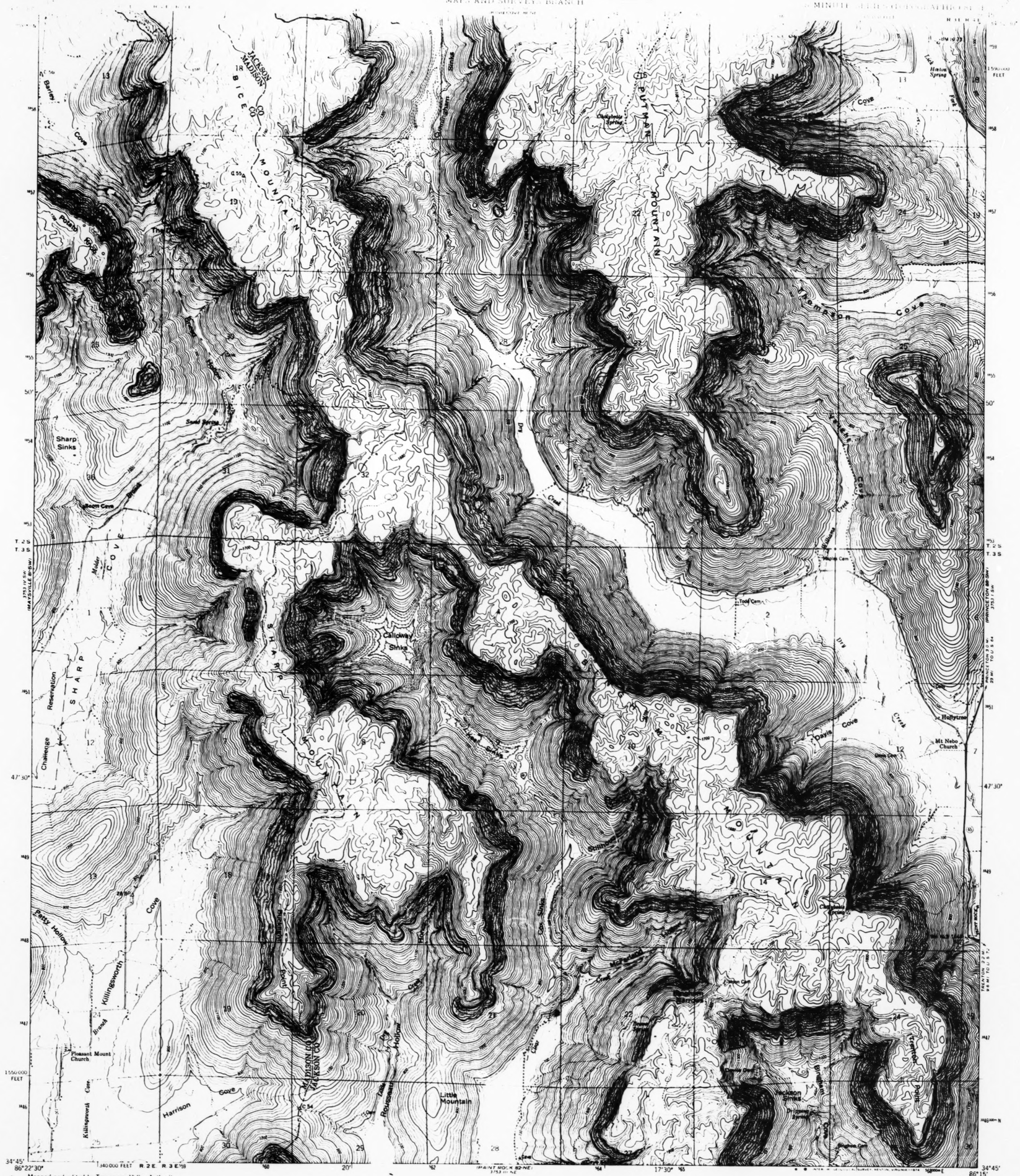
- af — earth flow in fill
- a/s — earth flow in strip castings
- a/r — earth flow in coal refuse

GADS 1° x 2° SHEET



Quadrangle does not contain landslides or related features

Limit of inventory



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by USC&GS, USGS, and TVA

Topography by USGS and TVA by multiplex methods from aerial photographs taken 1946. Field examination by TVA, 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Alabama (East) rectangular coordinate system
1000 metre Universal Transverse Mercator grid ticks, zone 16, shown in blue
Map photoinspected 1974
No major culture or drainage changes observed

CONTOUR INTERVAL 20 FEET

HOLLYTREE, ALA.

N3445 W8615/7.5

1948
PHOTOINSPECTED 1974
AMS 3753 IV SE-SERIES V844

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed

LANDSLIDES AND RELATED FEATURES

OF THE HOLLYTREE, ALA. QUADRANGLE

by

NOTE

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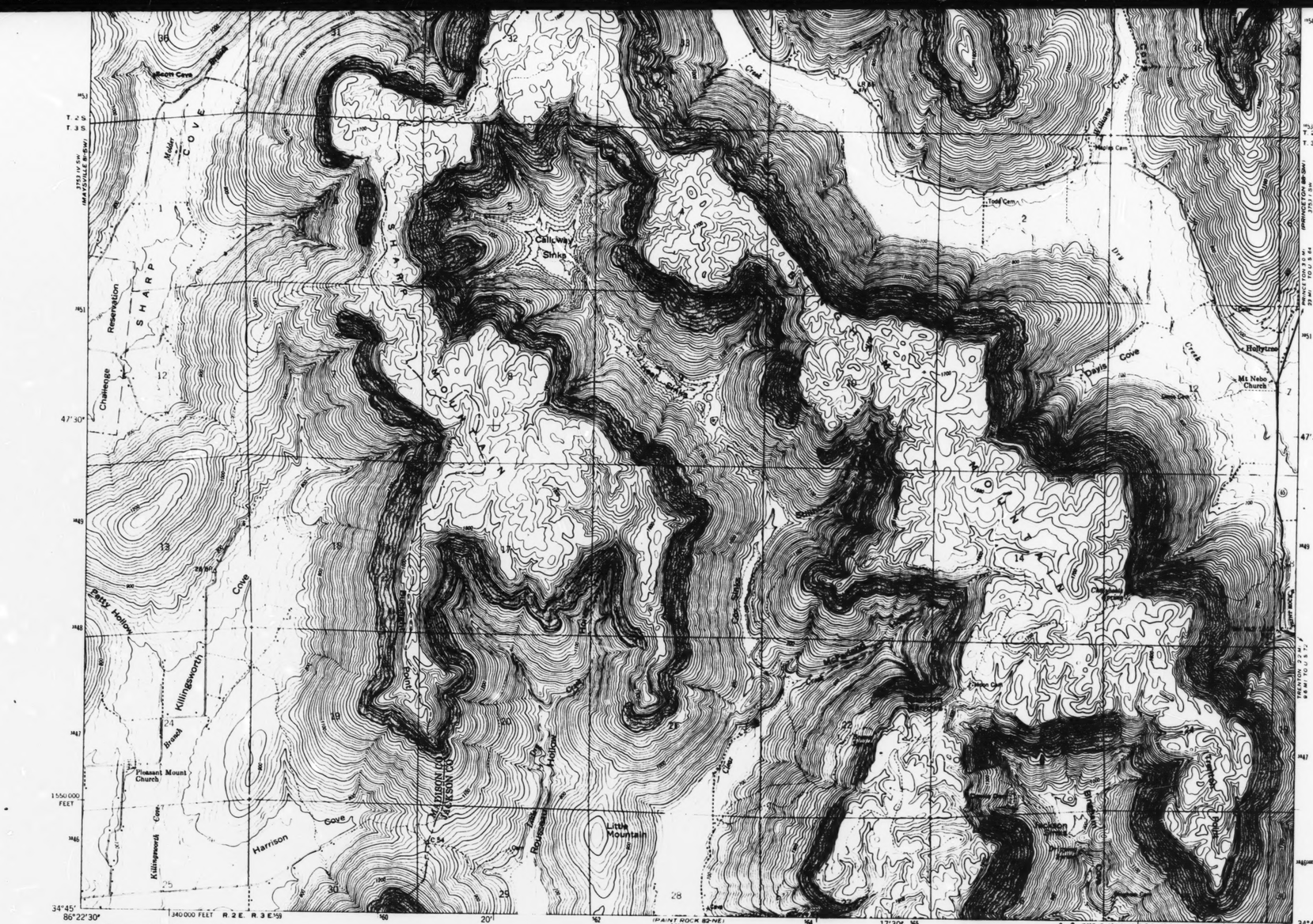
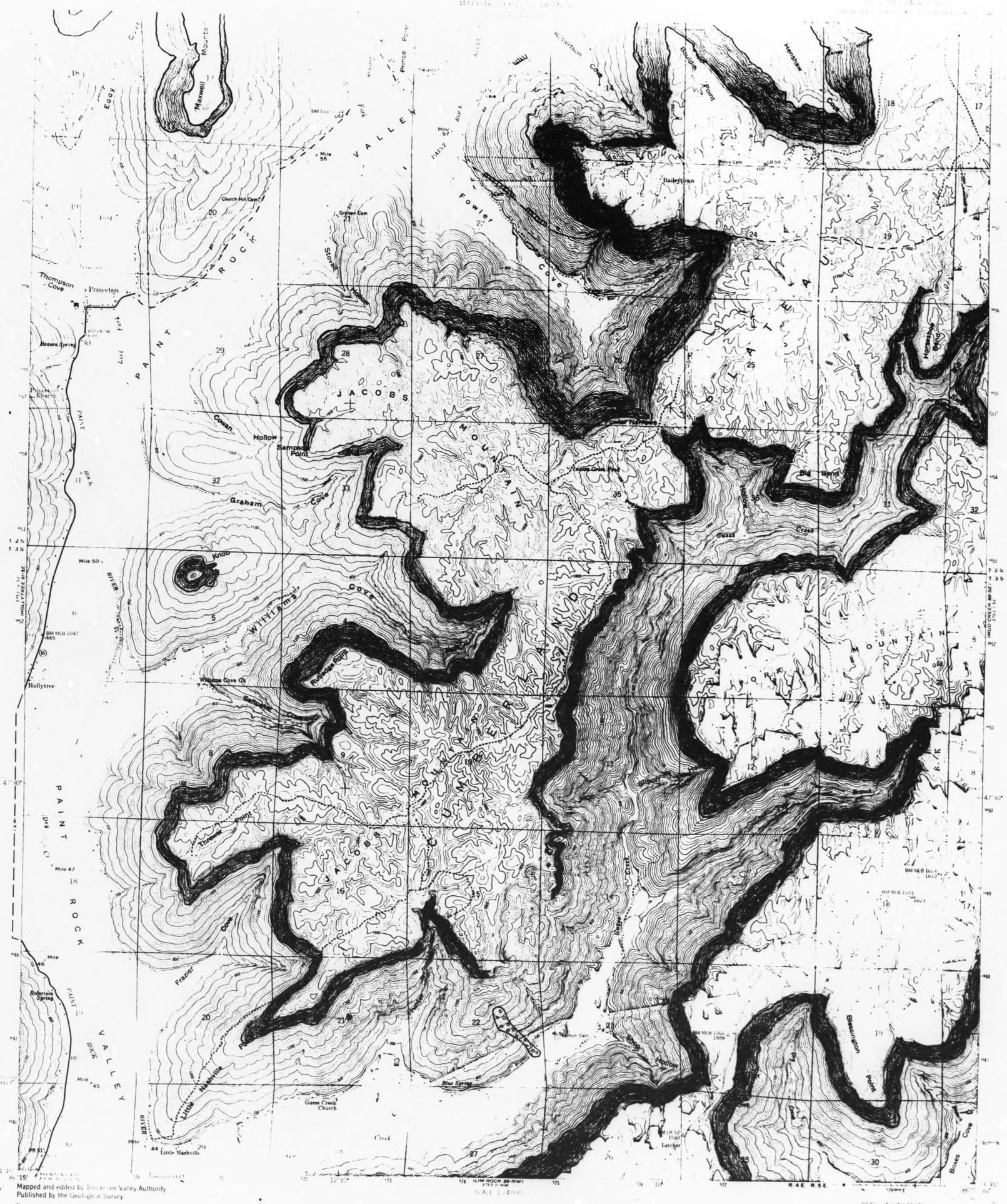

Beech Cove
Holder Cove
SHARP
Challenge Reservation
Callaway Sinks
Davis Cove
Creek
Hollytree
Mt Nebo Church
Toad Cem
Pleasant Mount Church
Killingsworth Cem
Killingsworth
Bently Hollow
Harrison Cove
Little Mountain
Rousseau
Holland
Cove
Ridge
Knob
Gap
Spring
Branch
Creek
Fork
Cem
Church
Mt
Hill
Valley
Flat
Ridge
Trail
Road
Tank
Mine
Quarry
Pond
Lake
Tower
Station
Building
Ruins
Canal
Levee
Dam
Dike
Well
Windmill
Spring
Cemetery
Church
School
Post Office
Reservoir
Tank
Oil or Gas Well
Mine
Quarry
Gravel Pit
Prospect
Tunnel
Dump
Wash
Intermittent Stream
Perennial Stream
Aqueduct
Canal
Ditch
Flume
Pipeline
Penstock
Siphon
Conduit
Tramway
Bridge
Footbridge
Overpass
Railroad
Railroad Siding
Railroad Turntable
Railroad Tunnel
Railroad Trestle
Railroad Bridge
Railroad Abandoned
Railroad Under Construction
Railroad Under Construction Bridge
Railroad Under Construction Tunnel
Railroad Under Construction Trestle
Railroad Under Construction Siding
Railroad Under Construction Turntable
Railroad Under Construction Abandoned



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Basic control by NOS, NAA, USA and USA

Topography by USA and USA by photogrammetric methods using aerial photographs taken 1978. Map field checked by USA 1978

Polyconic projection. 1927 North American datum. 10,000-foot grid based on Alabama coordinate system, east zone and west zone. 1000-meter Universal Transverse Mercator grid ticks, zone 16 shown in blue

PRINCETON, ALA.

1:24000

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S. Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE PRINCETON, ALA. QUADRANGLE

by

John S. Pomeroy

NOTE

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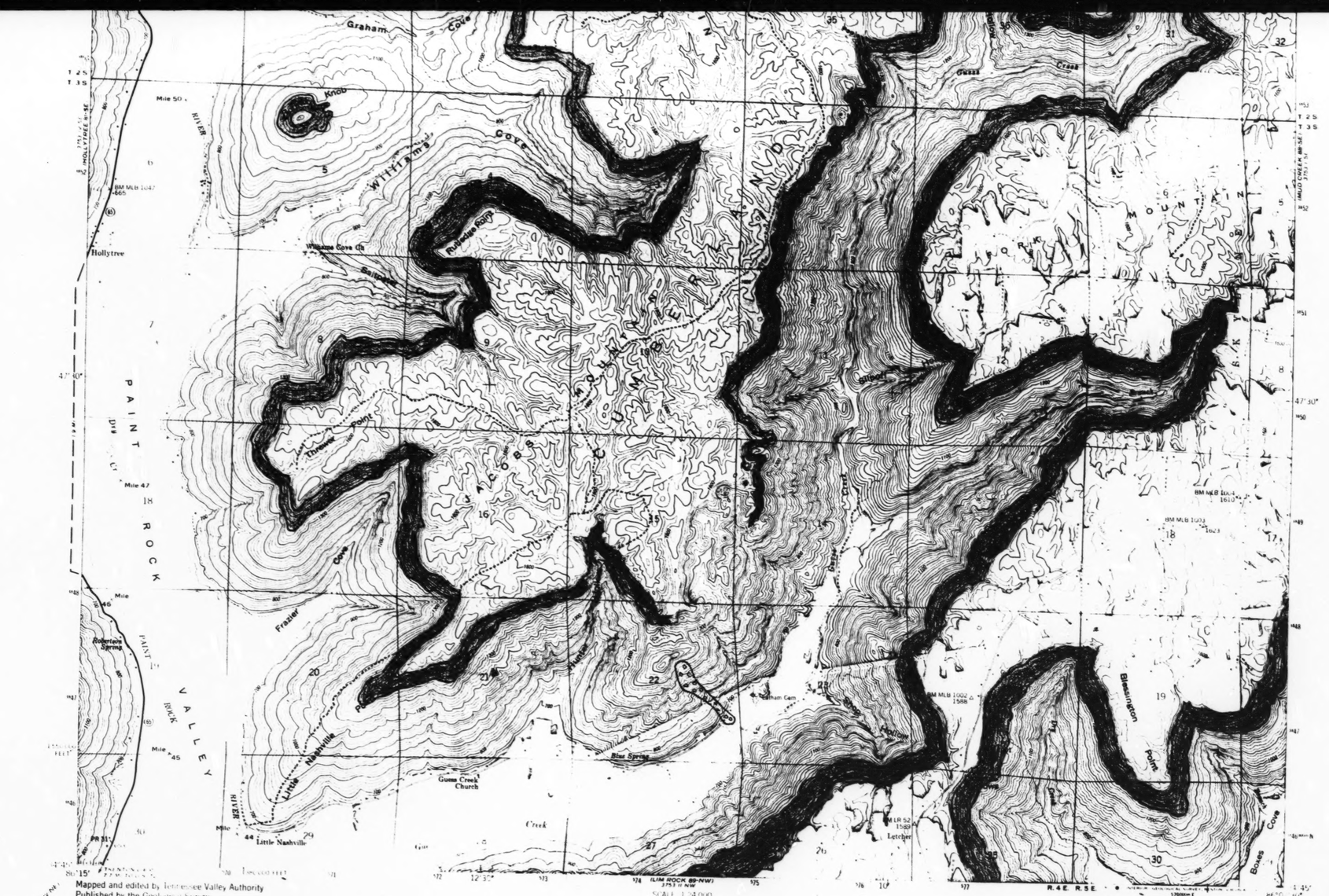

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Basic control by NOS, NOAA, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods using aerial photographs taken 1948.
Map field checked by TVA 1948

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama coordinate system, east zone
Unless otherwise noted, this quadrangle is entirely within Zone 16.

ROAD CLASSIFICATION

Heavy duty — Poor motor road
Medium duty — Wagon and jeep trail
Light duty — Foot trail
U.S. Route — State Route

TENNESSEE

PRINCETON, ALA.

1948

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

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LANDSLIDES AND RELATED FEATURES

OF THE PRINCETON, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (G-15)

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Coal refuse banks
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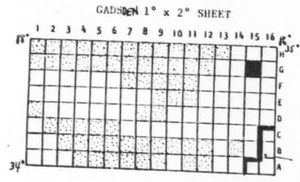
- g — site of gravel pit

Slides in man-made features
- af — earth flow in fill
- a/s — earth flow in strip castings
- a/r — earth flow in coal refuse

GADSDEN 1° x 2° SHEET

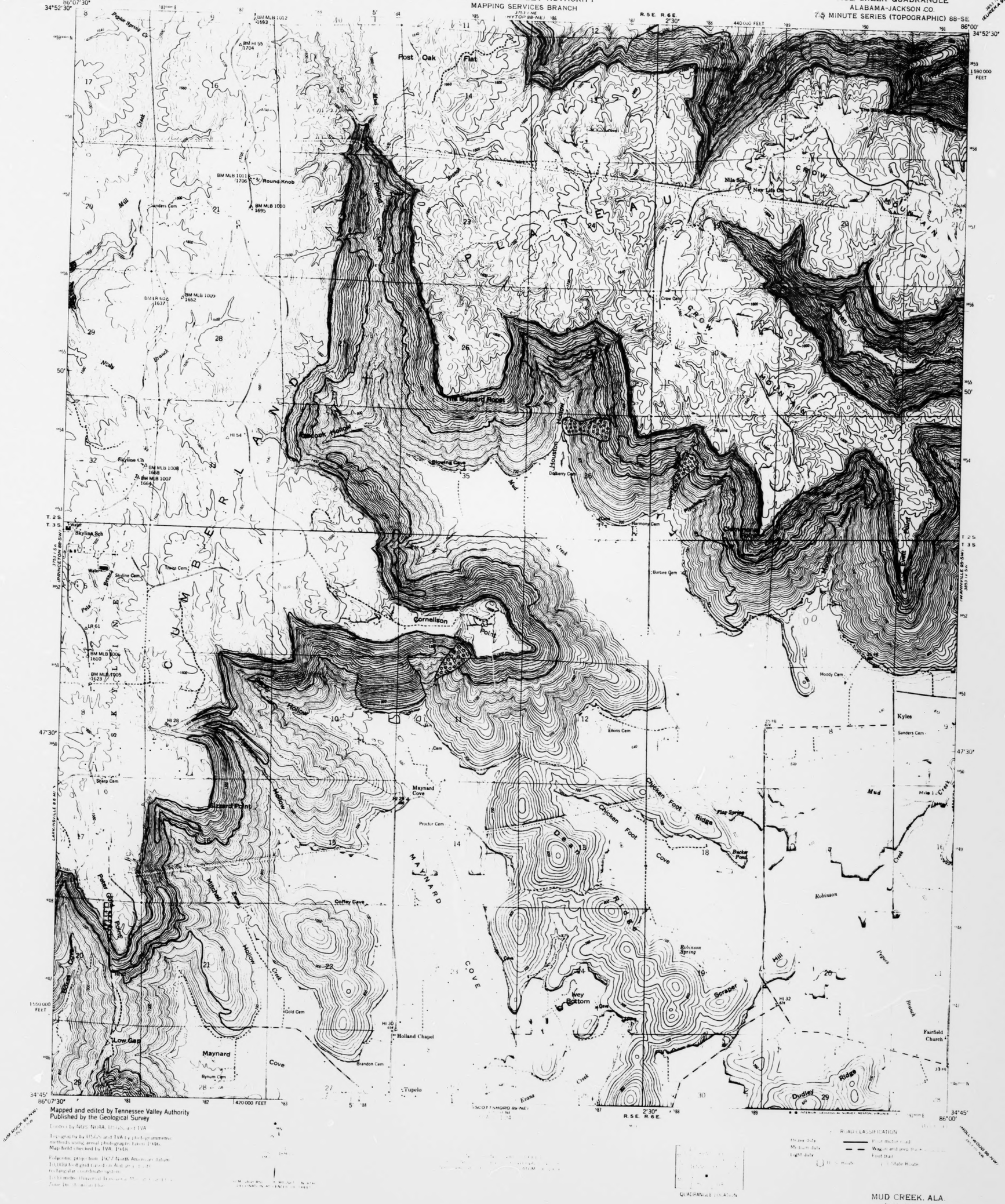


Quadrangle does not contain landslides or related features

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

MUD CREEK QUADRANGLE
ALABAMA-JACKSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC) 88-SE



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS, NOAA, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods from aerial photographs taken 1948.
Map field checked by TVA 1948

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama coordinate system
1,000-meter Universal Transverse Mercator grid ticks, zone 16, shown in blue

ROAD CLASSIFICATION
Heavy duty — Light duty — Unimproved dirt — Interstate Route — U.S. Route — State Route

MUD CREEK, ALA.
1948

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey standards

LANDSLIDES AND RELATED FEATURES

OF THE MUD CREEK, ALA. QUADRANGLE

by

John S. Pomeroy

1982

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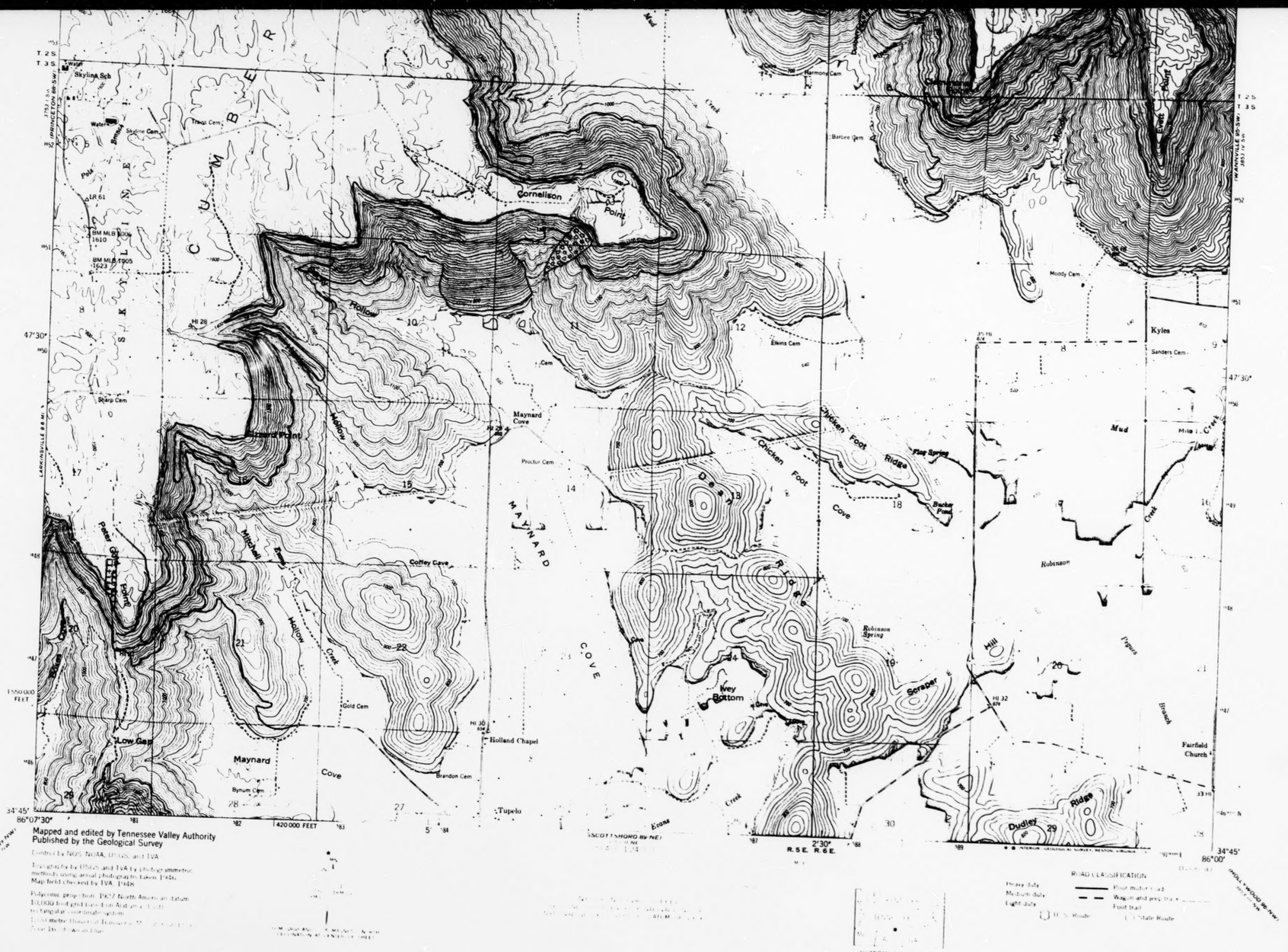

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS, NOAA, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods using aerial photographs taken 1948. Majfield checked by TVA 1948

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama coordinate system, east zone
1000-meter Universal Transverse Mercator grid ticks, zone 16
Shown in blue

ROAD CLASSIFICATION

Heavy duty — Four-wheel drive
Medium duty — Wagon and jeep trail
Light duty — Foot trail
U.S. Route — State Route

QUADRANGLE LOCATION

MUD CREEK, ALA.

1948

AMS 6757 I SE-SERIES V844

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey standards

ACTIVE OR RECENTLY ACTIVE LANDSLIDE
Complex landslide composed of earthflow, debris slide, earth and rock slump. Identified from historical records, and from scars, debris and other field evidence. Ground extremely unstable; sliding accelerated by excavation, loading and changes in drainage conditions. May include areas with several active slides too small to be shown separately. Questioned where doubtful. May be shown with symbol (a) where difficult to discern.

OLD LANDSLIDE
Area of extensive hummocky ground caused by earthflow and earth and rock slump. Lacks clear evidence of active sliding. Relatively stable in natural, undisturbed state, generally not affected by small structures properly sited in areas away from the edge of the toe; can be reactivated by extensive, rapid excavation, loading, and changes in ground water and surface water conditions. Area of old landslide probably includes recent ones not identified from field evidence or otherwise documented. Upslope boundary of landslide generally defined by modified scarp, but downslope (toe) may be gradational and not well defined. Questioned where doubtful.

LANDSLIDES AND RELATED FEATURES

OF THE MUD CREEK, ALA. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (G-16)

AREAS SUSCEPTIBLE TO DEBRIS FLOWS AND DEBRIS AVALANCHES
Primarily shallow, narrow ravines and chutes with accumulation of stony colluvium generally 10 ft. (3 m) or less in thickness; susceptible to rapid movement during intense rainfall. Most ravines and chutes designated show evidence of former debris flows and avalanches. Symbol a designates historical debris flow or debris avalanche.

AREAS SUSCEPTIBLE TO ROCKFALL
Steep, locally vertical, natural and man-made slopes and cliffs, 15 ft. (4.5 m) or more high; formed dominantly of sandstone, limestone, sandy shale, mudstone and claystone. Interbedded mudstone, claystone and shale weather rapidly leaving sandstone and limestone rock faces unsupported.

SOIL AND ROCK SUSCEPTIBLE TO LANDSLIDING
Soil and rock similar to that involved in landslides elsewhere in map area; primarily areas underlain by claystone, mudstone and shale associated with other rock types. Rock weathers rapidly on exposure forming clayey soil highly susceptible to sliding. Includes coves (U-shaped, shallow valleys) containing thick layers of clayey soil that are very susceptible to sliding where excavation breaks continuity of slope and where overloaded by artificial fill.

AREAS LEAST PRONE TO LANDSLIDES
Map areas in which no patterns or symbols are shown; primarily valley floors, ridge tops and broad benches; modification by excavation and fill may lead to local landslides. Includes slopes where landslides are sparse.

The first five digits of the open file number designate the specific 1:250,000 scale map sheet of which this quadrangle is a part. The last two digits designate the position of the quadrangle in a subdivision of the 1:250,000 scale map based on rows and tiers shown in the diagram to the right. The location of this quadrangle is shown by the black square.

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Strip mines (combination of letter symbols indicates complex formed of more than one type of strip mine)
- sh — bench with high wall
- sf — furrowed with high wall
- sd — multiple furrows and multiple benches
- ss — hilltop removed
- srg — reclaimed by grading
- sru — reclaimed by secondary use
- sh/r — regraded in part, high wall remains

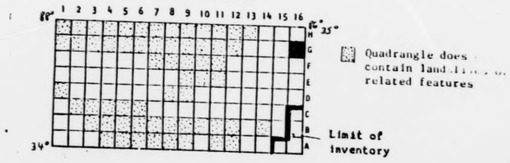
Coal refuse banks
- r — identified on aerial photographs; not classified in field check
- rb — not burnt nor on fire
- rbb — burnt
- rbd — burning
- rbs — sludge

Quarries
- q — quarry site
- qub — spoil bank, quarry waste

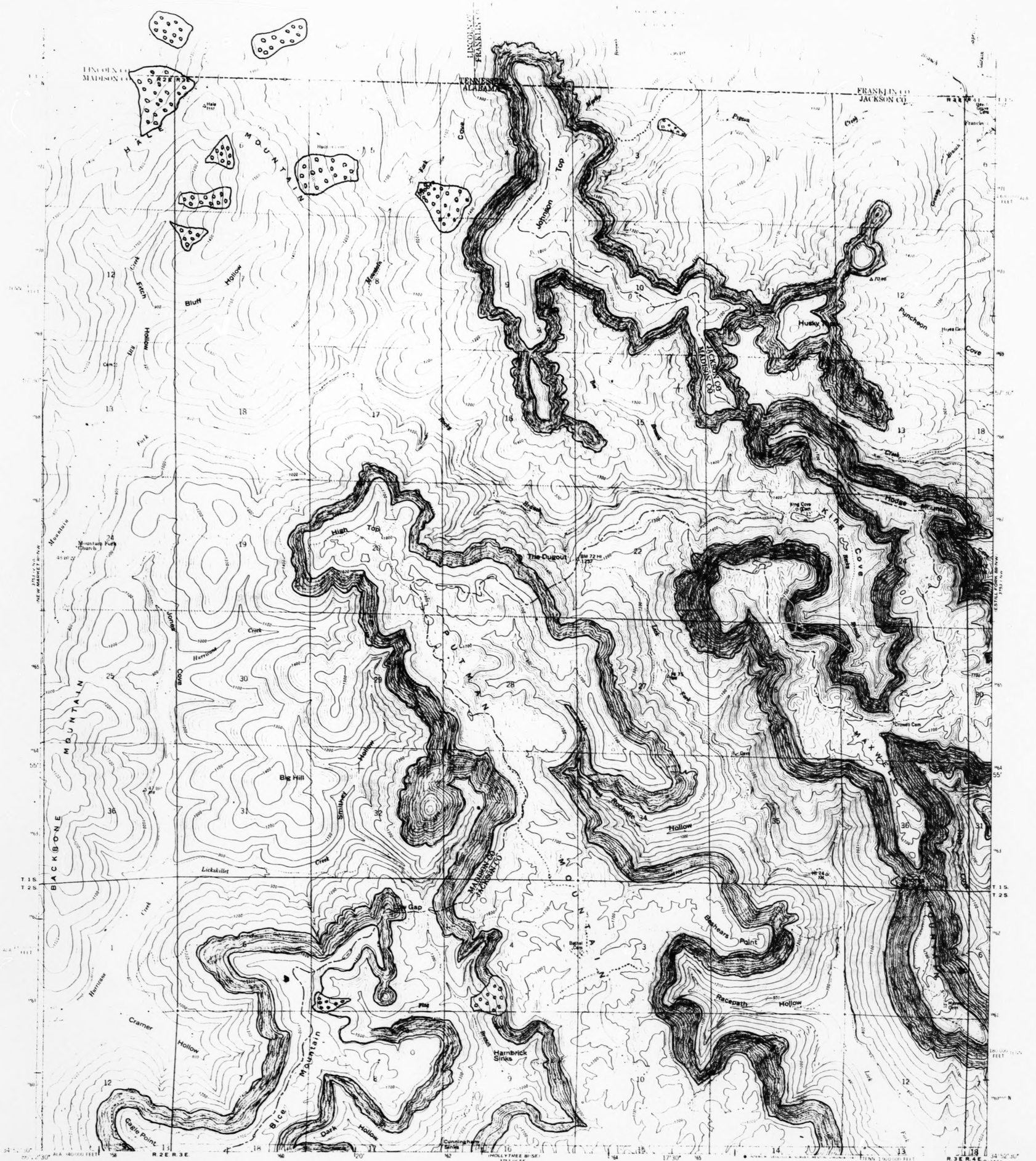
Gravel pits
- g — site of gravel pit

Slides in man-made features
- af — earth flow in fill
- a/s — earth flow in strip castings
- a/r — earth flow in coal refuse

GADSDEN 1° x 2° SHEET



Quadrangle does contain landslides and related features



Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

KING COVE, ALA.-TENN.

1948

LANDSLIDES AND RELATED FEATURES

OF THE KING COVE, ALA.-TENN. QUADRANGLE

BY

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981

NOTE

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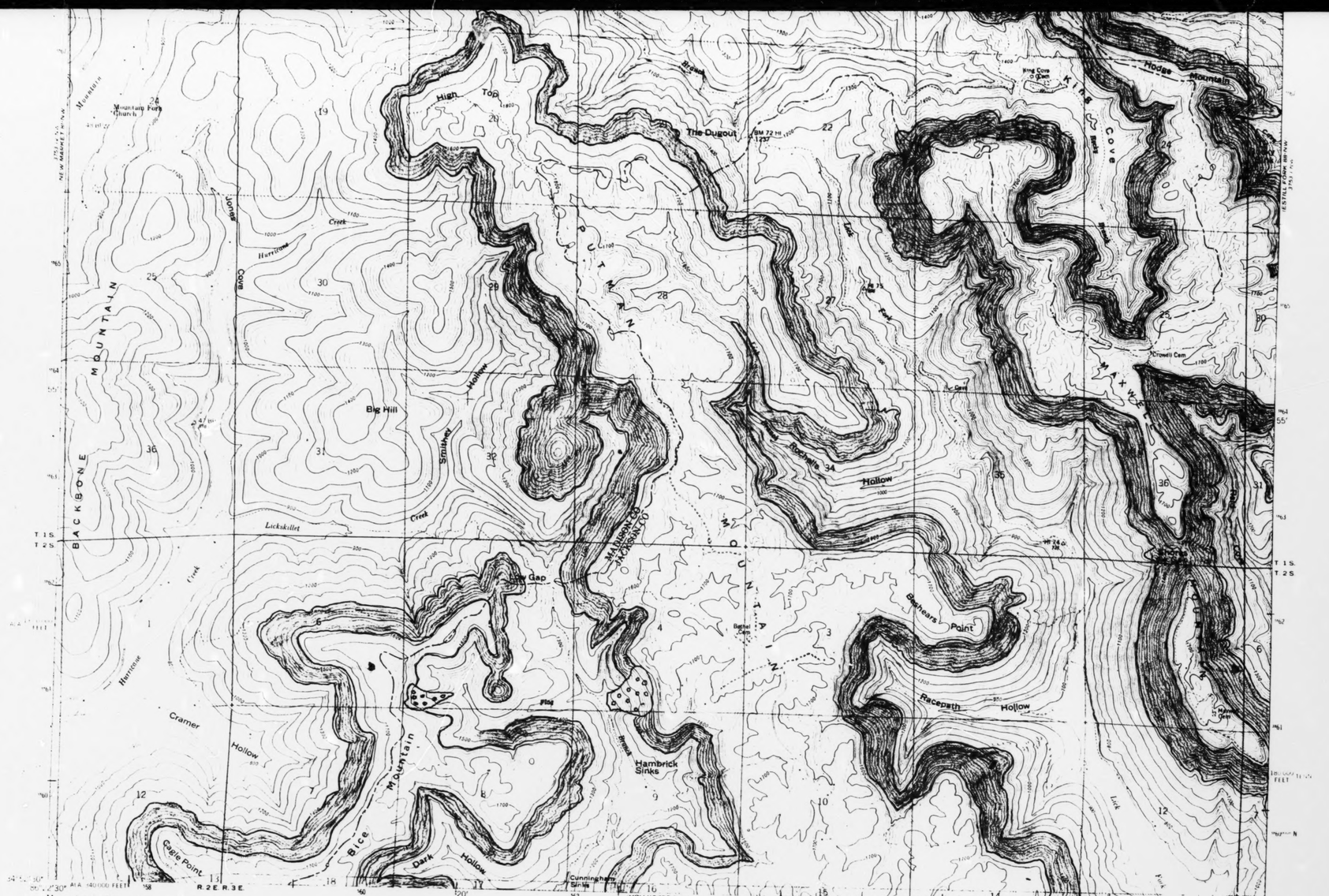

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by TVA, TN-AA, ITGS, and TVA

Topography by ITGS and TVA by photogrammetric methods from aerial photographs taken 1948.
Map field-checked by TVA, 1948

Projection (Polyconic) and 10,000-foot grid ticks based on Alabama coordinate system, east zone, and Tennessee coordinate system, east zone
1000-meter Universal Transverse Mercator grid ticks, zone 16, shown in blue

KING COVE, ALA.-TENN.

1948

LANDSLIDES AND RELATED FEATURES

OF THE KING COVE, ALA.-TENN. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (H-14)

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
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Coal refuse banks

- r — identified on aerial photographs; not classified in field check
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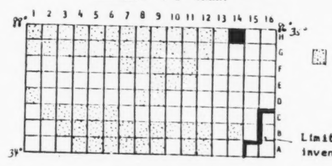
GADSDEN 1° x 2° SHEET



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

ESTILL FORK QUADRANGLE
ALABAMA-TENNESSEE
7.5 MINUTE SERIES (TOPOGRAPHIC) 88-NW

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS, NOAA, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods from aerial photographs taken 1971.
Map field checked by TVA, 1981

Projection and 10,000-foot grid, Alabama coordinate system, west zone
1,000-meter Universal Transverse Mercator grid, zone 16
Alabama coordinate system, west zone
Datum is mean sea level
Unmarked interval between contours is 20 feet

ROAD CLASSIFICATION

Heavy Duty
Medium Duty
Light Duty

ESTILL FORK, ALA.-TENN.

1948

AMS 5751 I NW-SERIES V844

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/U.S.Geological Survey standards

LANDSLIDES AND RELATED FEATURES

OF THE ESTILL FORK, ALA.-TENN. QUADRANGLE

by

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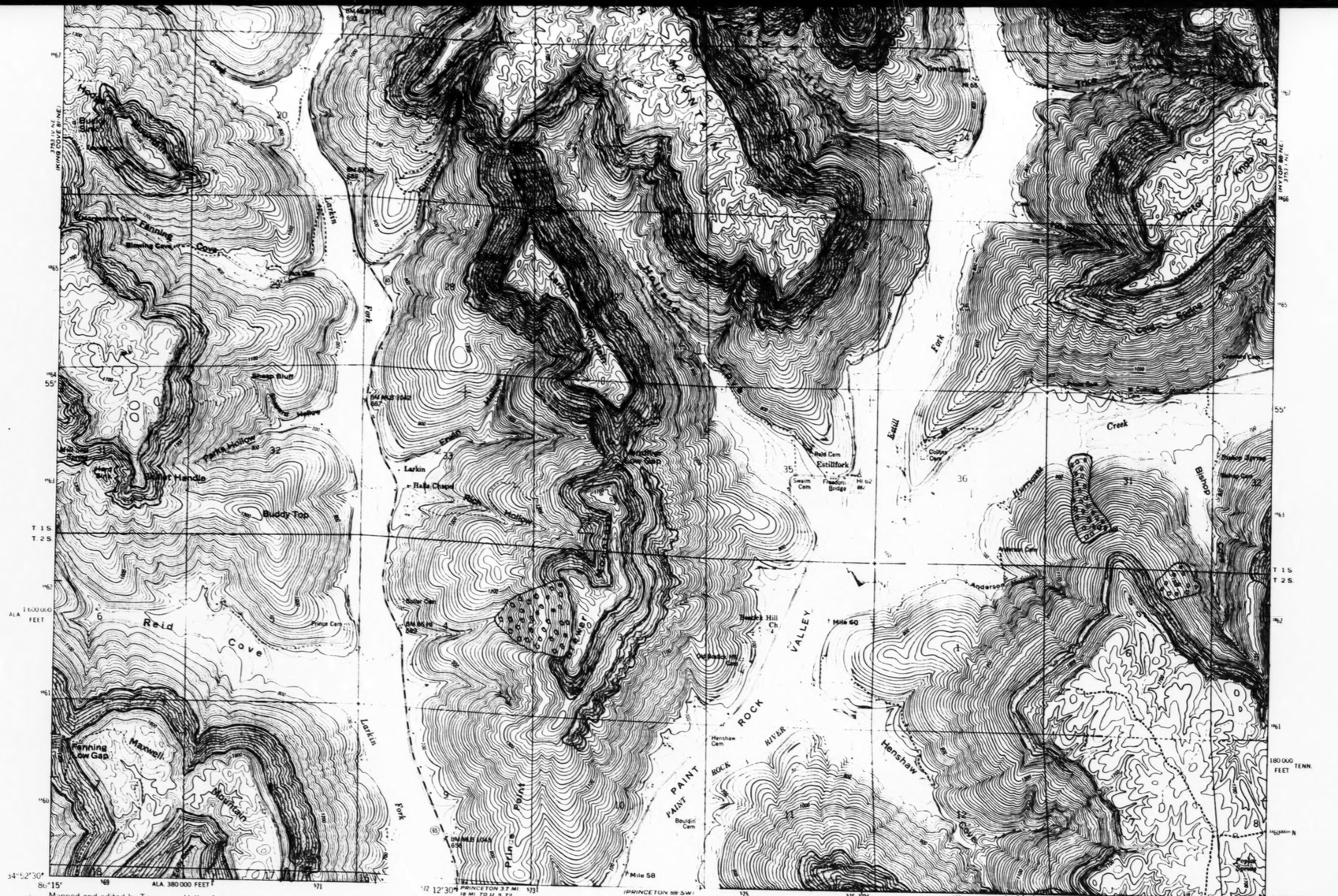

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS, NOAA, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods from aerial photographs taken 1971.
Field checked by TVA, 1980

Projection (projections 1 & 2 North American datum)
10,000-foot grid: Zone 15, Tennessee coordinate system
Alaska (each of two zones) coordinate system
1000-meter Universal Transverse Mercator grid, zone 16
Zone 15, shown in blue

ROAD CLASSIFICATION

Heavy duty — Poor motor road
Medium duty — Wagon and jeep trail
Light duty — Foot trail
U.S. Route — State Route

ESTILL FORK, ALA.-TENN.

1948

AMS 3753 I NW-SERIES V844

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LANDSLIDES AND RELATED FEATURES

OF THE ESTILL FORK, ALA.-TENN. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

OPEN FILE MAP 82-181 (H-15)

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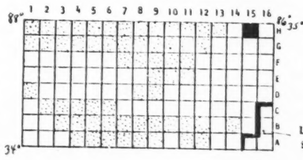
GADSDEN 1° x 2° SHEET



Quadrangle does not contain landslides or related features

Limit of inventory

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
TENNESSEE VALLEY AUTHORITY
MAPPING SERVICES BRANCH

HYTOP QUADRANGLE
ALABAMA-TENNESSEE
7.5 MINUTE SERIES (TOPOGRAPHIC)

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS/NOAA, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods using aerial photographs taken 1948. Map field checked by TVA, 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Tennessee and Alabama (Lcc) rectangular coordinate systems
1000 metre Universal Transverse Mercator Grid ticks
Zone 16, shown in blue

ROAD CLASSIFICATION

Heavy-duty	Poor motor road	
Medium-duty	Wagon and jeep track	
Light-duty	Foot trail	
U. S. Route	State Route	

QUADRANGLE LOCATION

HYTOP, ALA.-TENN.
N3452.5—W8507.5/7.5
1948

AMS 5755 I NE-SERIES V844

Landslides and related features interpreted from aerial photographs:

1:20,000 (black and white) 1971, 1972
1:40,000 (black and white) 1978

Photointerpretation and field check 1980-1981
This map is preliminary and has not been reviewed for conformity w/ U.S.Geological Survey editorial standards

LANDSLIDES AND RELATED FEATURES

OF THE HYTOP, ALA.-TENN. QUADRANGLE

by

John S. Pomeroy

1982

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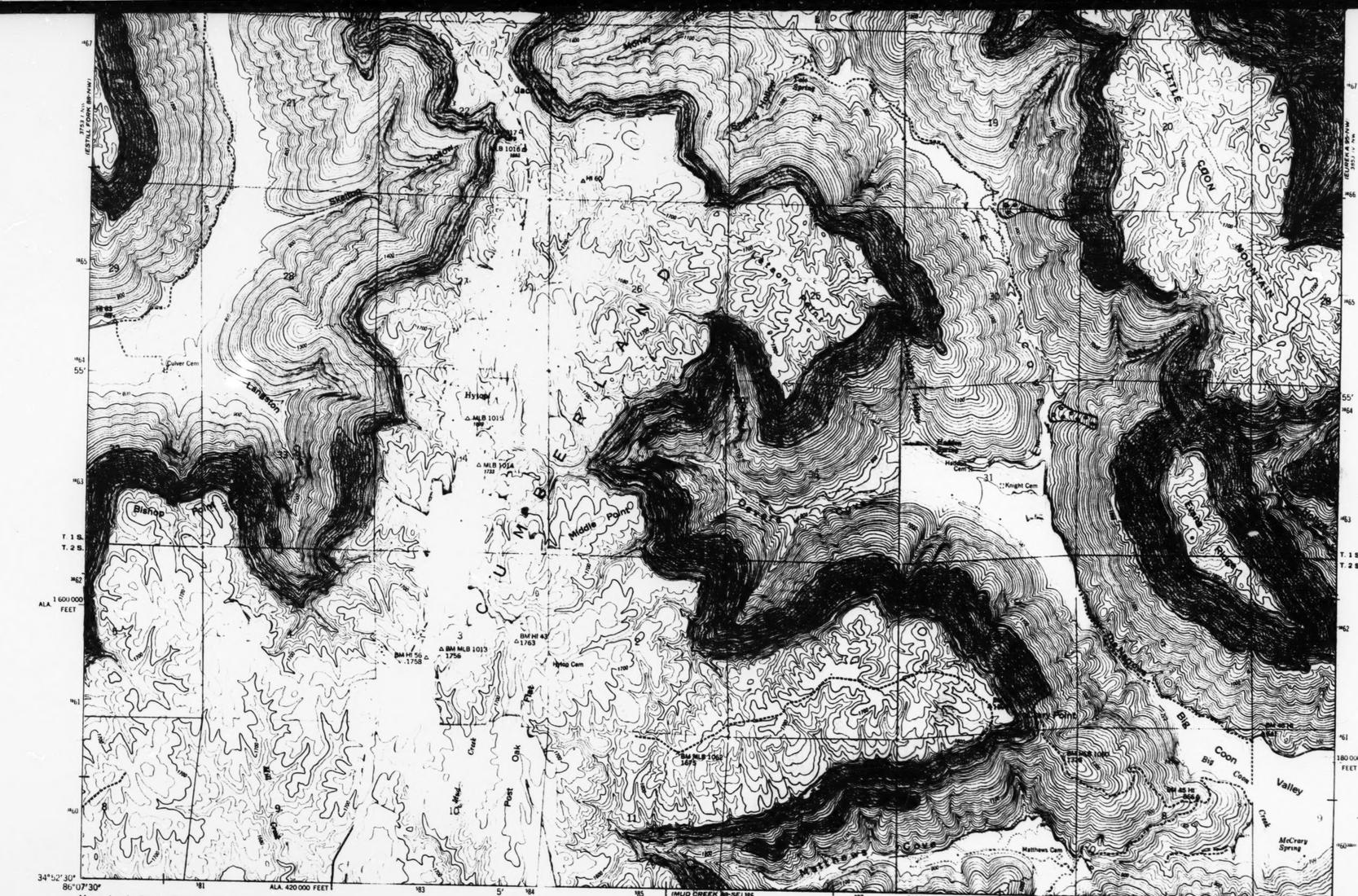

Mapped and edited by Tennessee Valley Authority
Published by the Geological Survey

Control by NOS/NOAA, USGS, and TVA

Topography by USGS and TVA by photogrammetric methods using aerial photographs taken 1946. Map field checked by TVA, 1948

Polyconic projection. 1927 North American datum
10,000 foot grid based on Tennessee and
Alabama (East) rectangular coordinate systems
1000 metre Universal Transverse Mercator Grid ticks,
Zone 16, shown in blue

CONTOUR INTERVAL 20 FEET

ROAD CLASSIFICATION

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Medium-duty — Wagon and jeep track
Light-duty — Foot trail
U.S. Route — State Route

QUADRANGLE LOCATION

HYTOP, ALA.-TENN.

1948

Landslides and related features interpreted from aerial photographs:

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1:40,000 (black and white) 1978

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LANDSLIDES AND RELATED FEATURES

OF THE HYTOP, ALA.-TENN. QUADRANGLE

by

John S. Pomeroy

1982

U.S. Geological Survey

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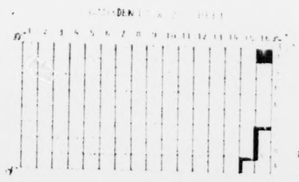

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